Syrian Private University Faculty of

Computer & Information Engineering

Department of Software &

Information Systems Engineering



Title

Website For Managing Private School

Graduation project 2

Submitted to Complete the Requirements for Obtaining a Bachelor's Degree in Informatics Engineering for Obtaining a Bachelor's Degree in Informatics Engineering

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SUPERVISOR CERTIFICATION

I Certify that the preparation of this project entitled……,prepared by……,was made under my supervision at Faculty Of Computer, Informatics & Communication Engineering in partial Fulfillment of the Requirements for the Degree of Bachelors of Software and Information System Engineering.

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Abstract

The website gives teachers, students and parents access to a range of important features such as timetable management, effective communication between teachers, students and parents, and a simplified evaluation and reporting system. The website interface is designed to be user-friendly and attractive, with a focus on providing a comfortable user experience across mobile devices. We take care to ensure the security of personal information and data, and follow a strict privacy policy. The school can benefit from the site by improving the efficiency of operations, enhancing communication and saving time, while students and parents benefit from easy access to information and constant communication with the school. If you have any questions or require further information, please contact us and we will be happy to assist.

نبذة عامة

يتيح الموقع للمعلمين والطلاب وأولياء الأمور الوصول إلى مجموعة من الميزات الهامة مثل إدارة الجداول الزمنية، والتواصل الفعال بين المعلمين والطلاب وأولياء الأمور، ونظام التقييم والتقارير المبسط. تم تصميم واجهة الموقع لتكون سهلة الاستخدام وجذابة، مع التركيز على توفير تجربة مستخدم مريحة عبر الأجهزة المحمولة. نحرص على ضمان أمان المعلومات الشخصية والبيانات، ونتبع سياسة الخصوصية الصارمة. يمكن للمدرسة الاستفادة من الموقع من خلال تحسين كفاءة العمليات وتعزيز التواصل وتوفير الوقت، بينما يستفيد الطلاب وأولياء الأمور من سهولة الوصول إلى المعلومات والتواصل المستمر مع المدرسة. إذا كان لديكم أي استفسارات أو تحتاجون إلى مزيد من المعلومات، يرجى الاتصال بنا وسنكون سعداء بتقديم المساعدة.

1: INTRODUCTION AND PROJECT DEFINITION

1.1. PRIVATE SCHOOL

In the diverse and evolving world of education, private schools are one of the options that parents turn to secure a distinguished education for their children. Private schools play an important role in developing children's abilities and achieving families' aspirations to provide a distinguished and comprehensive education for their children. These schools have many characteristics and advantages that make them a preferred choice for some over other educational institutions.

Private schools are those educational institutions that are operated by private bodies or entities rather than the local or national government. These schools are typically funded through tuition fees, donations, and investments. Private schools are characterized by following different curricula and offering a diverse educational environment that meets the needs of a diverse group of students.

1.2. BRINGING THE PROBLEM

The world is largely witnessing that technological knowledge is becoming known, and information is becoming an integral part of our daily lives. It has gained wide resonance in all fields, and has also contributed to focusing on legal services in the field of searching for a scientific result. The need has emerged to use new technologies to provide this. Services are made available to the public and schools, in an easy and quick way, thus achieving ease of school management and ease of communication between the teacher, student, and guardian.

1.3. PROJECT CONCEPT

The idea of the project revolves around automating all kinds of administration within the school. In addition to facilitating the communication process

between the teacher, student, and guardian. Without the guardian going to school.

1.4. AIM OF THE PROJECT

The project aims to build an electronic platform for school management. In terms of the director's orders. In addition to all internal departments. Providing the student and parent with services that facilitate the process of communicating with the school. It also organizes teachers' schedules, which saves time and effort.

1.5. HOW DO WE SOLVE THE PROBLEM

Software life cycle: It includes the stage of reference study, requirements gathering, analytical study, design, implementation and testing.

Major task: The project was done on The **INREMENTAL Model**.

2: THEORETICAL STUDY

First of all, why do we need E-Services, and why do we need to provide the home maintenance throw the electronic services:

2.1. E-Services

• **Definition:** Electronic service, short as E-service, is a general term that refers to services over the information – communication technologies, The term E-service has many applications and can be found in many disciplines, The two dominant application areas of E-services are:

- **E-business (E-Commerce):** E-services mostly provided by businesses or Non-Government Organizations (private sector), transaction services for handling online orders, application hosting by application service providers (ASP-s) and any processing capability that is obtainable on the Web
- **E-government (non-Commerce):** E-services provided by government to citizens or business (public sector is the supply side), the use and description of the e-service in this page will be limited to the context of e-government only where of the E-Service is usually associated with prefix "public": Public e-services. In some cases, we will have to describe aspects that are related to both fields like some conferences or journals which cover the concept of "E-Service" in both domains of E-government and E-business.

2.2. Importance of E-Services

- Accessing a greater customer base.
- Broadening market reach.
- Alternative communication channel to customers
- Increasing services to customers.
- Enhancing perceived company image.
- Gaining competitive advantages.

2.3 Benefits of E-Services

- The quality of service from customer's point of view. A company providing services on the Internet can easily be managed, development and the improvement of the service depending on the customers´ requirements. It is possible to adapt to the repertory of the products and services and needs of the field more rapidly.
- Differing from the competitors by providing completely new types of services to the customers
- Today´s generations are used to using computers and online services. They use them with ease and thus, online shopping will not fail because of technology, unless the user interface is poorly designed.
- Contemporary networks are fast and computers have enough processing power so that customers will not get frustrated due to the long delay times or slow response times.
- Anything anywhere in the world can be purchased with just a credit card´s number and a few mouse clicks. Shoppers have no need for finding time or to take the effort of going in to a physical store and standing in line there.

2.4. Types of E-Services

E-services can be divided into several broad categories that are defined by the type of individuals and/or organizations that provide and use these services. Three of these major categories are referred to: business-to-consumer, consumer-to-consumer and business-to-business. In addition, there are also eservices that can involve: government agency, which are referred to either government-to-business or government-to-consumer, within these broad categories there are several different types of services that can be provided. We present five of these services within the e-service framework: e-trailers, customer support, network providers, and information providers and application service providers. Some firms provide only one type of service. While others may provide several. For example, an e-trailer will often also provide customer support.

2.5. E-Services examples

1-Booking Online Appointments Service.

2-Purchasing Standards.

3-Online Shopping, Etc.

2.6. Similar Applications

- **Al Maaref School:**
  - **Services:**
    - Display parents' opinions.
    - Apply for job vacancies.
    - Customize a page for each Manager.
    - Show events and activities.
    - Availability of reports.



Figure 1. Al Maaref School

- **Al Noor School:**
  - **Services**:
    - Registration with terms and conditions.
    - Time table.
    - Pay fees.
    - A page for each level of study.
    - View homework assignments.



Figure 2. Al Noor School

- **Al Resala School:**

  - **Services:**

    - Presentation of faculty members.
    - Parents' opinions.
    - A page for each academic stage in both Arabic and English.
    - Contact the school.



Figure 3. Al Resala School

2.7. COMPARISON OF SIMILAR APPLICATIONS

Schools	Advantages	Disadvantages
Al Maaref School	Design suitable for all ages. It provides a job application service for teachers and employees. The possibility of parents communicating with teachers.	Lack of a page to display student evaluations during the semester
Al Noor School	A special page that displays student evaluations. A page to display school assignments. A page to display school hours and timings.	Lack of a page to display parents' opinions. There is no page available to display job vacancies
Al Resala School	An easy user interface suitable for all users. A page to display the school's internal regulations.	There is no page available to display job vacancies. There is no page available to display student evaluations

Table 1.Comparison of similar application

3: ANALYTICAL STUDY

3.1. Requirements Document

In this project, information was collected in order to carry out the analytical study of the system in order to obtain documented and correct information, which leads to the success of the project.

Documentation and Auxiliary Reports: Some references on the Internet were relied upon, in addition to benefiting from some previous reports and projects, as their importance was to give a broader and more comprehensive conception of the idea, while giving perceptions of what non-functional services that the system must provide.

3.2. Project Requirements

3.2.1. Functional Requirements

- **Manager:**

Requirements ID	Requirements Description	Status (wait/done)
SCMS-1	login	Done
SCMS-2	View profile (information personal)	Done
SCMS-3	Edit profile (information personal)	Done
SCMS-4	Show teacher list	Done
SCMS-5	Add Teacher	Done
SCMS-6	Edit information teacher	Done
SCMS-7	Delete teacher	Done
SCMS-8	Log out	Done
SCMS-9	Show Employee list	Done
SCMS-10	Add Employee	Done
SCMS-11	Edit Information Employee	Done
SCMS-12	Delete Employee	Done
SCMS-13	Search	Done
SCMS-14	Create Account manager	Done

Table 2.Functional Requirements (Manager)

- **Employee:**

Requirements ID	Requirements Description	Status (wait/done)
SCMS-15	login	Done
SCMS-16	View profile (information personal)	Done
SCMS-17	Edit profile (information personal)	Done
SCMS-18	Log out	Done

Table 3.Functional Requriements (Employee)

- **Student Affairs:**

Requirements ID	Requirements Description	Status (wait/done)
SCMS-19	Show Student list	Done
SCMS-20	Add student	Done
SCMS-21	Edit Information Student	Done
SCMS-22	Delete Student	Done
SCMS-23	Create Class	Done
SCMS-24	Edit Information Class	Done
SCMS-25	Delete Class	Done
SCMS-26	Create division	Done
SCMS-27	Edit Information division	Done
SCMS-28	Delete division	Done
SCMS-29	Adding students to academic classes	Done
SCMS-30	Transferring a student to another division	Done
SCMS-60	Student promotion	Done

Table 4.Functional Requriements (Student Affairs)

- **Employee Examination:**

Requirements ID	Requirements Description	Status (wait/done)
SCMS-31	Create an exam schedule	Done
SCMS-32	View exam schedule	Done
SCMS-33	Edit exam schedule	Done
SCMS-34	Delete exam schedule	Done
SCMS-35	Add grades	Done
SCMS-36	View grades	Done
SCMS-37	Edit grades	Done
SCMS-38	Delete grades	Done
SCMS-39	Create schedule	Done
SCMS-40	Edit schedule	Done
SCMS-41	Delete schedule	Done
SCMS-42	View schedule	Done

Table 5. Functional Requriements (Employee Examination)

- **Student:**

Requirements ID	Requirements Description	Status (wait/done)
SCMS-43	login	Done
SCMS-44	Log out	Done
SCMS-45	View profile (information personal)	Done
SCMS-46	Edit profile (information personal)	Done
SCMS-47	View grades	Done
SCMS-48	View Exam Schedule	Done
SCMS-49	View Schedule	Done
SCMS-50	View Absences and lineage	Done
SCMS-59	view school assignments	Done

Table 6. Functional Requriements (Student)

- **Teacher:**

Requirements ID	Requirements Description	Status (wait/done)
SCMS-51	login	Done
SCMS-52	Log out	Done
SCMS-53	View profile (information personal)	Done
SCMS-54	Edit profile (information personal)	Done
SCMS-55	View Schedule	Done
SCMS-56	Presence and absence	Done
SCMS-57	Edit Presence and absence	Done
SCMS-58	Add school assignments	Done

Table 7. Functional Requriements (Teacher)

- **Guardian**

Requirements ID	Requirements Description	Status (wait/done)
SCMS-61	Sign up	Done
SCMS-62	Login	Done
SCMS-63	View personal information	Done
SCMS-64	Edit personal information	Done
SCMS-65	Log out	Done
SCMS-66	View academic file	Done
SCMS-67	View financial file	Done
SCMS-68	Add payment	Done

Table 8. Functional Requriements (Guardian)

3.2.2. Non-Functional Requirements

1. Security: Every system must have a good level of security, to make sure the data is protected against attacks.

2. Performance: System must respond to certain users' actions under certain workload.

3. Usability: It is easy and simple app. that every-one can use whatever his/her age is.

3.3. Methodology used

The methodology used: **INCREMENTAL Model:** is an approach to project development, most commonly used in software development, that focuses on delivering small, complete parts of a project repeatedly. Instead of trying to build the final product all at once, the project is broken down into increments, and each increment builds upon the previous one, adding new functionalities.

Typically, the Incremental Methodology follows these steps for each increment:

1. **Planning:** Functions to be included in the current increment are identified and planned.
2. **Design:** Components and modules necessary to implement these functions are designed.
3. **Implementation:** These components are built or developed.
4. **Testing:** Developed functions are tested to ensure they are error-free and meet requirements.
5. **Deployment/Delivery:** The completed and usable increment is delivered to the client or stakeholders for review.
6. **Feedback:** Feedback is collected and used to plan for the next increment

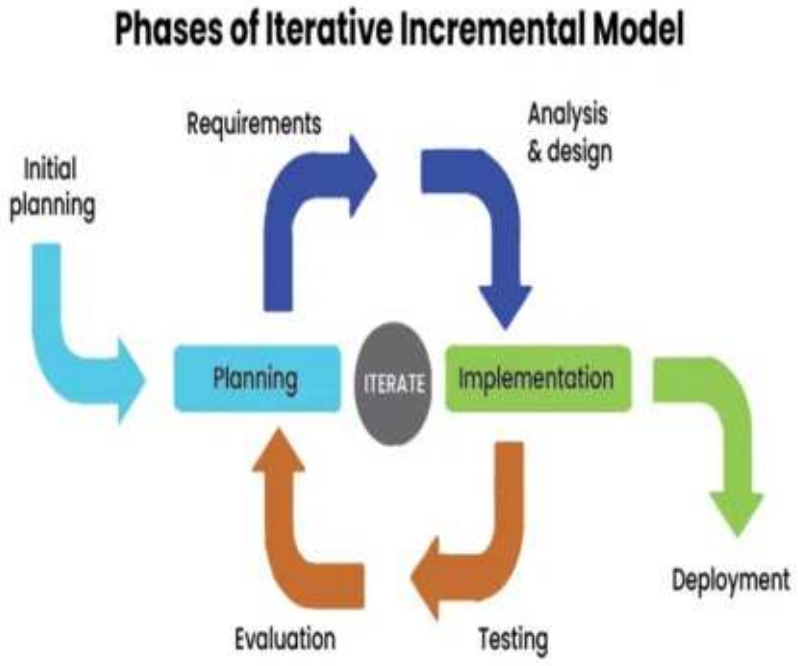


Figure 4- Incremental Model



Figure 5- Gantt Chart Diagram

4. Unified Modeling Language (UML) Diagrams

3.4.1. Use Case: Diagrams

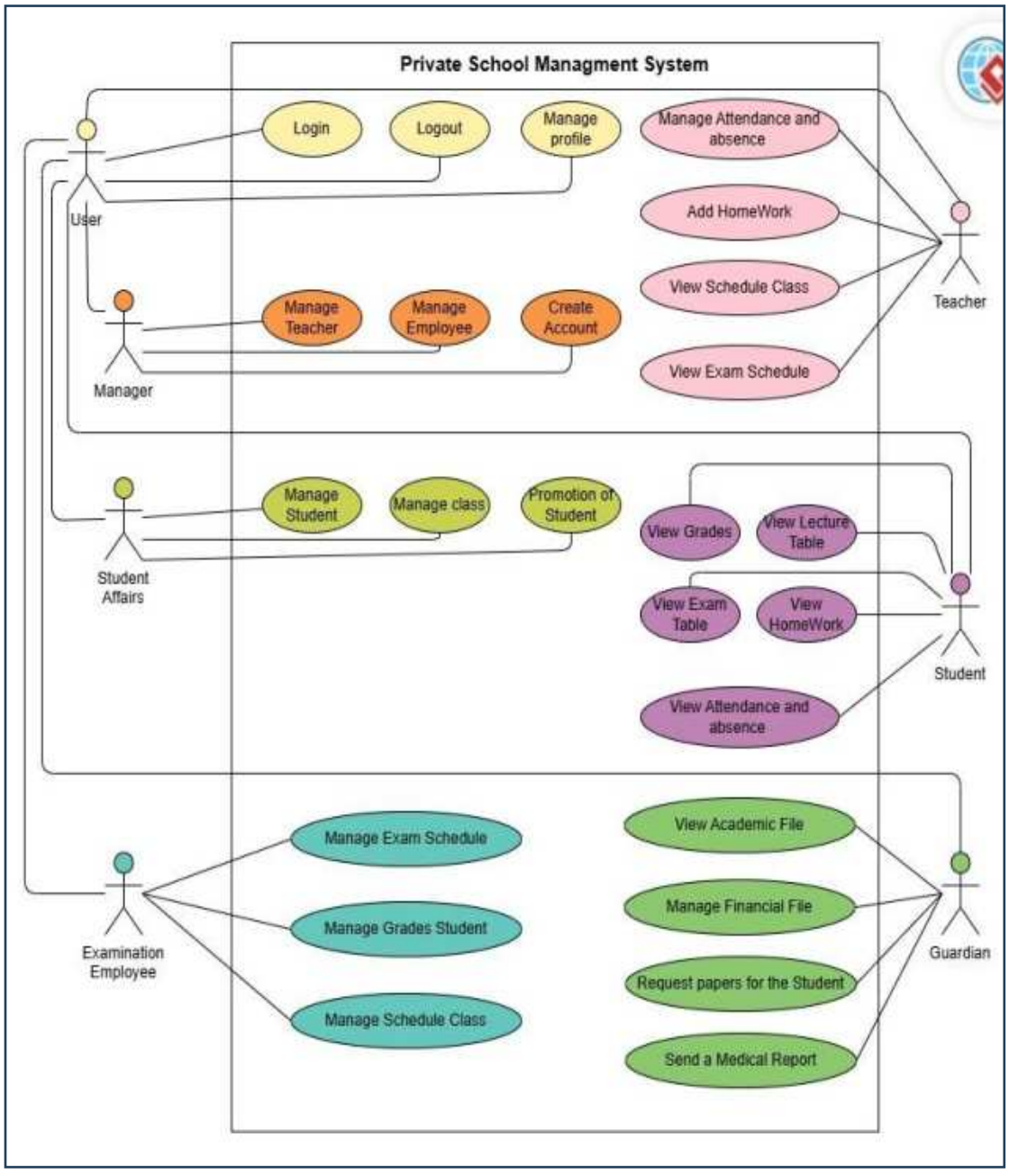


Figure 6- Use Case Diagrams

3.4.2. Use Case Specification

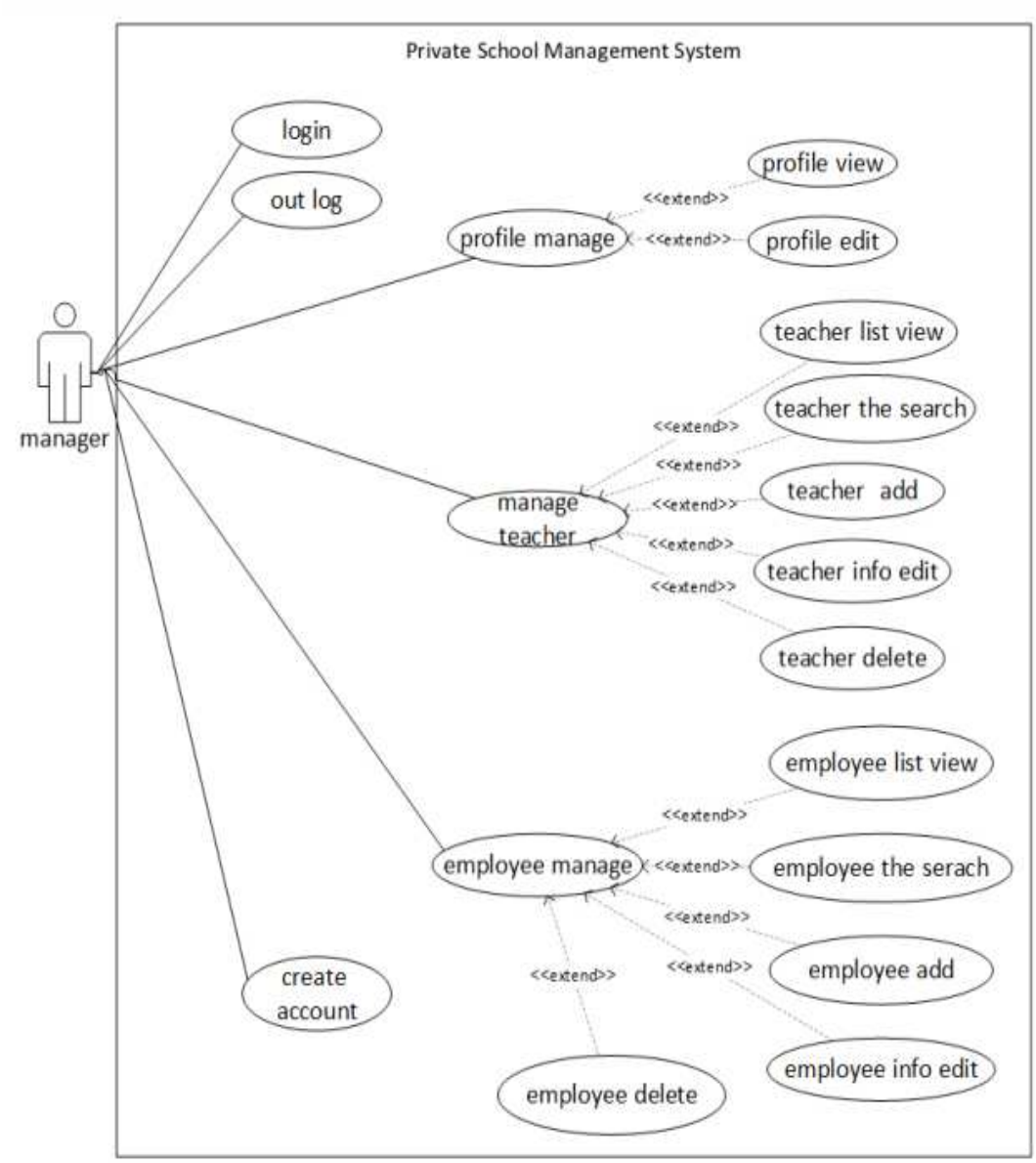


Figure 7. UseCase low level Manager

1. Login

ID	SCMS-1
Description	login
Actors	manager
Preconditions	• The manager must have an account in the system • The manager must have a valid username and password • The system must be available and accessible
Main path	1. The manager provides the User name and password to the system 2. The system verifies the validity of the User name and password in the database 3. If the information is correct, the system logs in successfully
Subsequent terms	Redirecting the user to his home page
Alternate path	1. If the information is incorrect, the system sends an error message and directs the user to enter the User name and password again.

Table 9. Use Case Specification (Login)

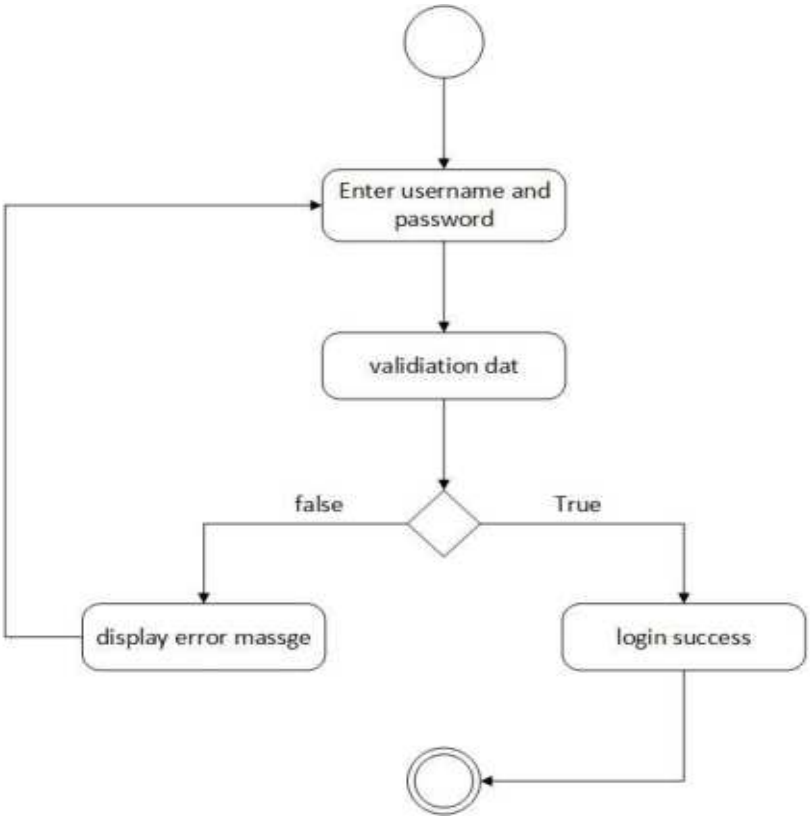


Figure 8. Login Activity diagram

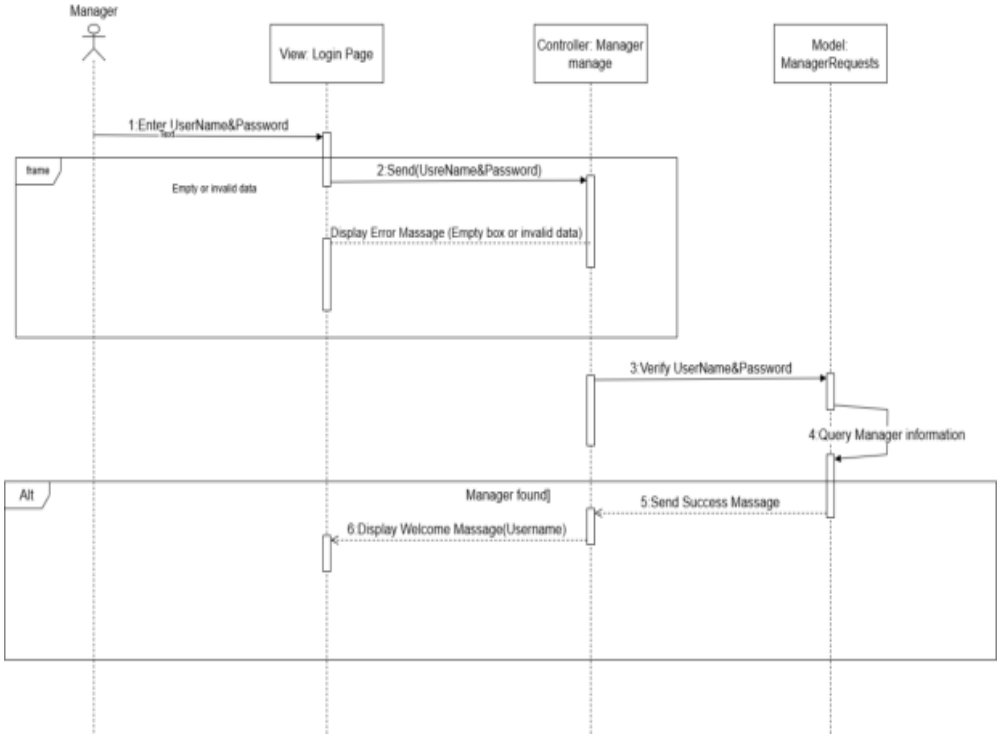


Figure 9. Login Sequences diagram

2. View profile (information personal)

ID	SCMS-2
Description	View profile (information personal)
Actors	User
Preconditions	• The user must have an account in the system • The user must log in to the system
Main path	1- User click on My profile link 2- System get data from database and displays profile information
Subsequent terms	

Table 10. Use Case Specification View profile (information personal))

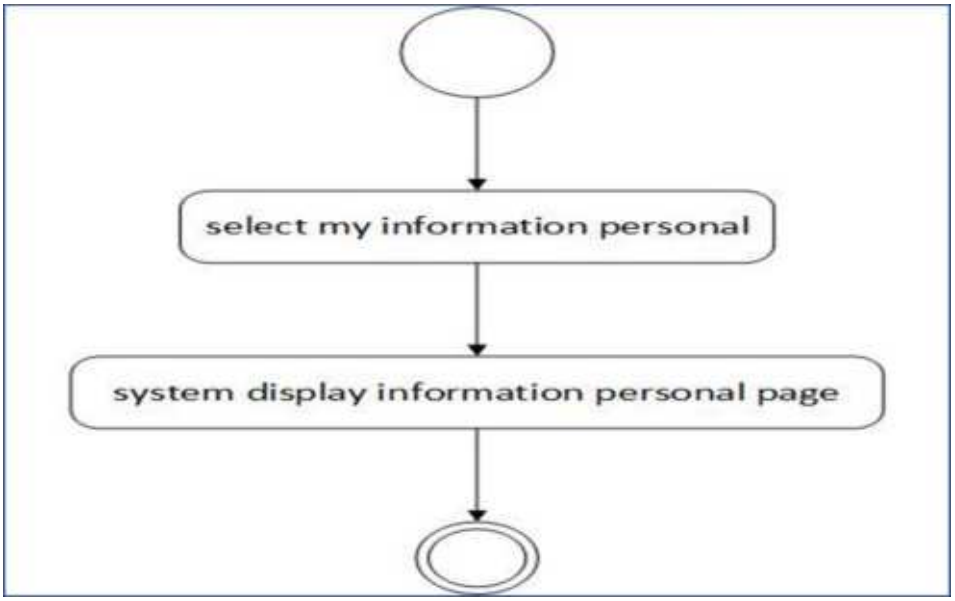


Figure 10. View profile (information personal) Activity diagram

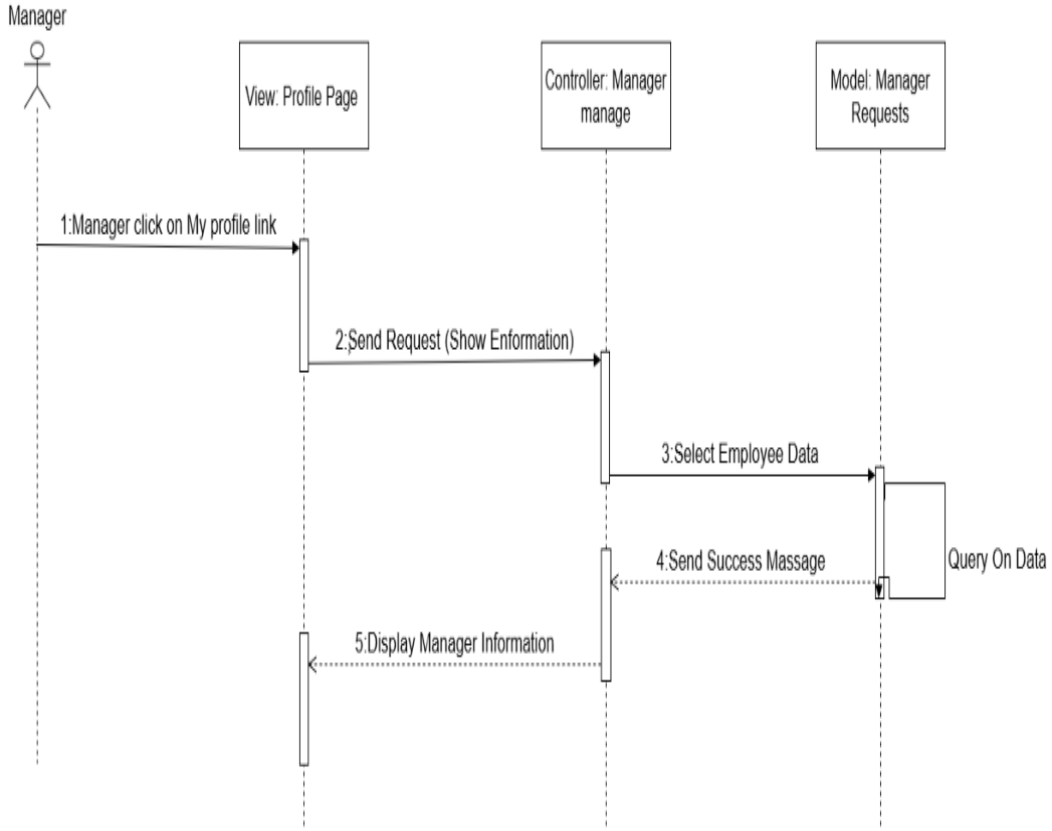


Figure 11. View profile (information personal) Sequences diagram

3. Edit profile (information personal)

ID	SCMS-3
Description	Edit profile (information personal)
Actors	manager
Preconditions	user must have accounts in the system
Main path	1. User click on Edit bottom in My profile page 2. System display Edit form and asks user to edits data 3. User enter a new data 4. System validates a new data and shows anew information
Subsequent terms	Update relevant information throughout the system
Alternate path	User enter invalid data -or duplicate phone number and system display an error and go to step '2'

Table 11. Use Case Specification (Edit profile (information personal))

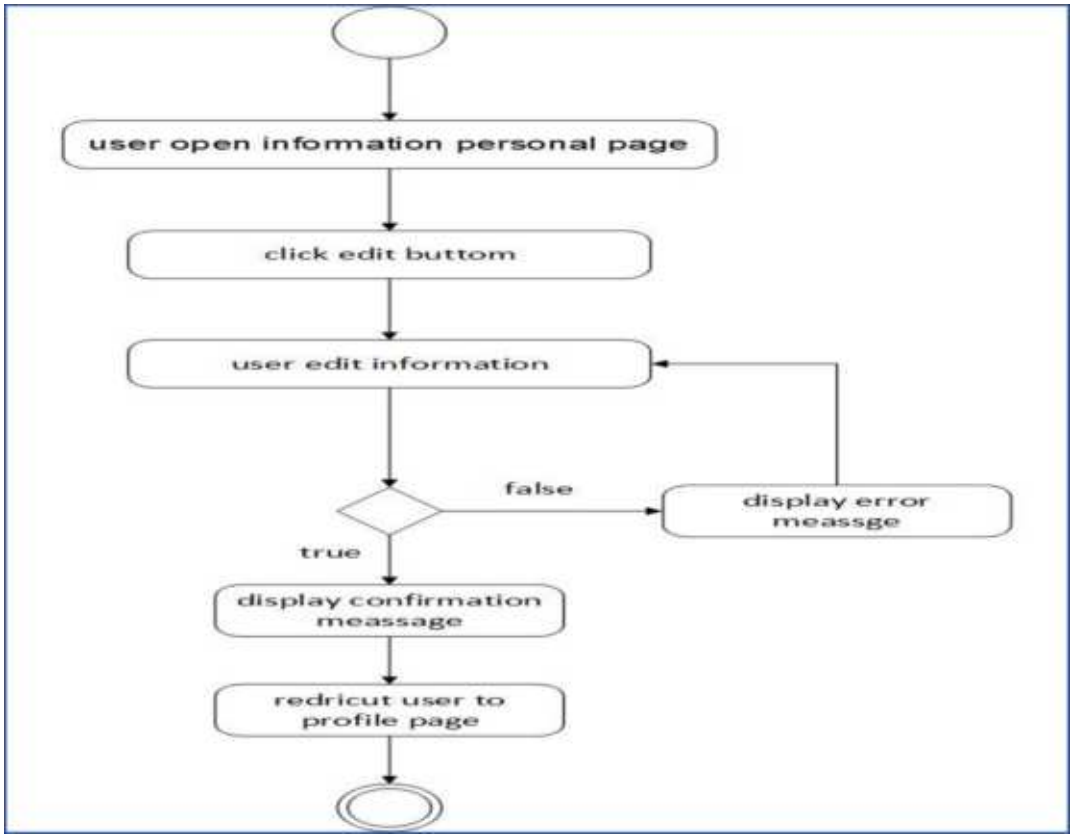


Figure 12. Edit profile (information personal) Activity diagram

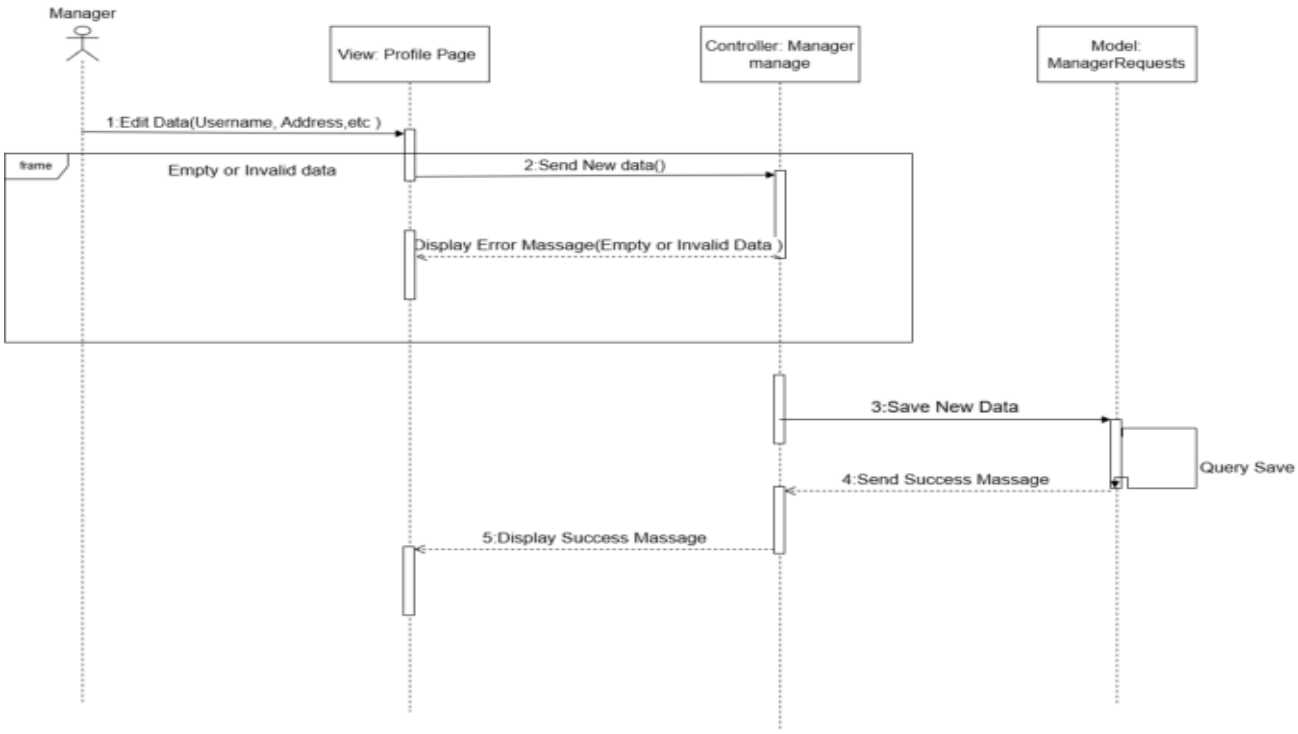


Figure 13. Edit profile (information personal) Sequences diagram

4. Show teacher list

ID	SCMS-4
Description	Show teacher list
Actors	manager
Preconditions	• The manager must have an account to log in to the system • The system must be available
Main path	1) The manager clicks on the option to show teacher list 2) Directing the manager to the teacher list page.
Subsequent terms	Not found
Alternate path	Not found

Table 12. Use Case Specification (Show teacher list)

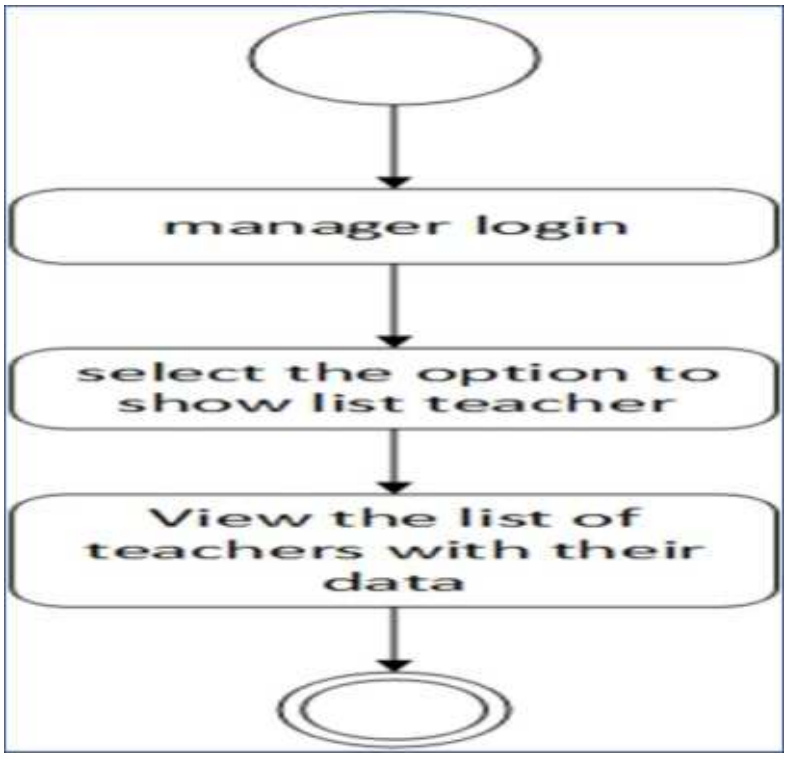


Figure 14. Show teacher list Activity diagram

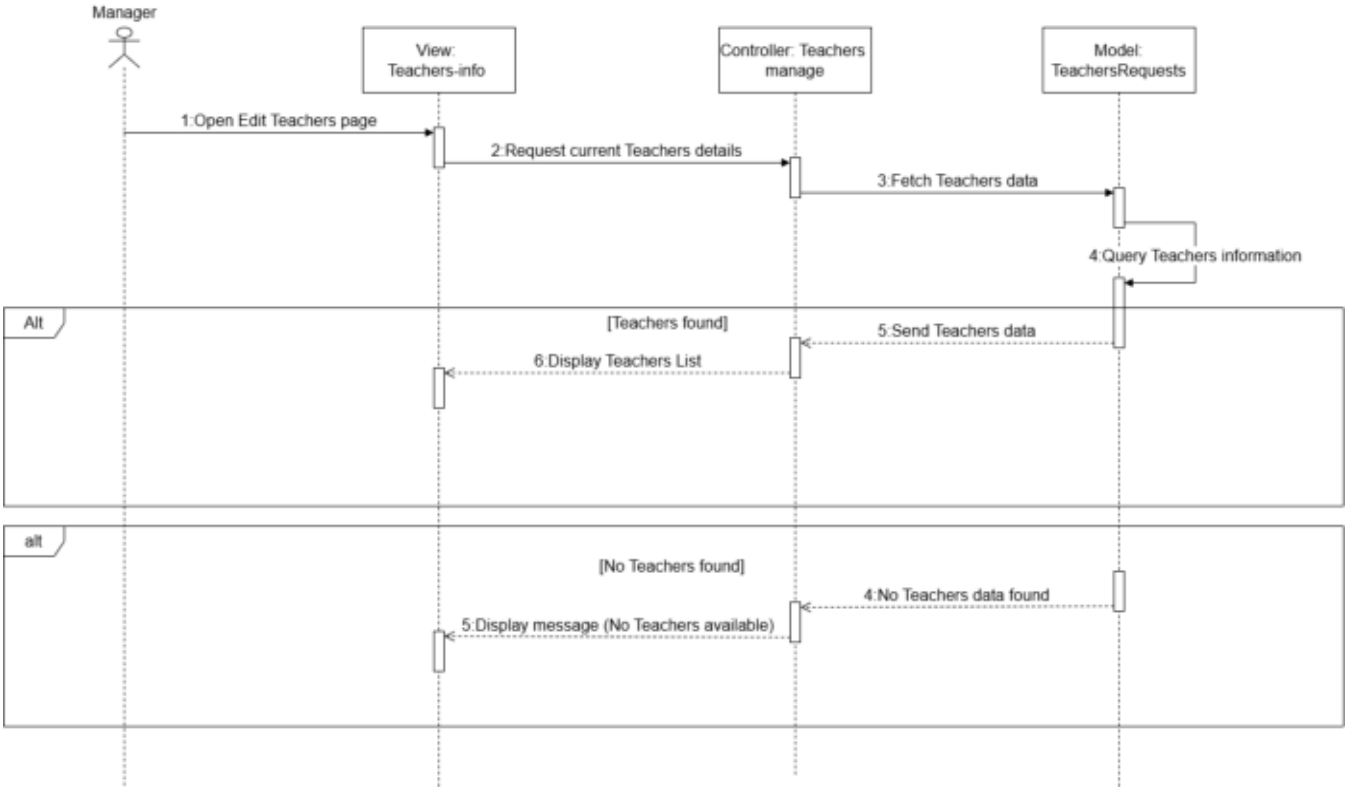


Figure 15. Show teacher list Sequences diagram

5. Add Teacher

ID	SCMS-5
Description	Add Teacher
Actors	Manager
Preconditions	• manager must have an account in the system and access to the Add Teacher functionality
Main path	1. manager accesses the function of adding Teacher in the system. 2. The system provides a form for entering teacher information, including: Personal data, contact information, qualifications, employment information 3. manager completes the information form. 4. registration employee clicks the “Save” button to add the Teacher to the system. 5. The system verifies the accuracy of the information entered 6. If the information is correct, the Teacher is added to the system
Subsequent terms	Updating course information throughout the system
Alternate path	If the Teacher information is incorrect, a message appears and the information is re-entered

Table 13. Use Case Specification (Add Teacher)

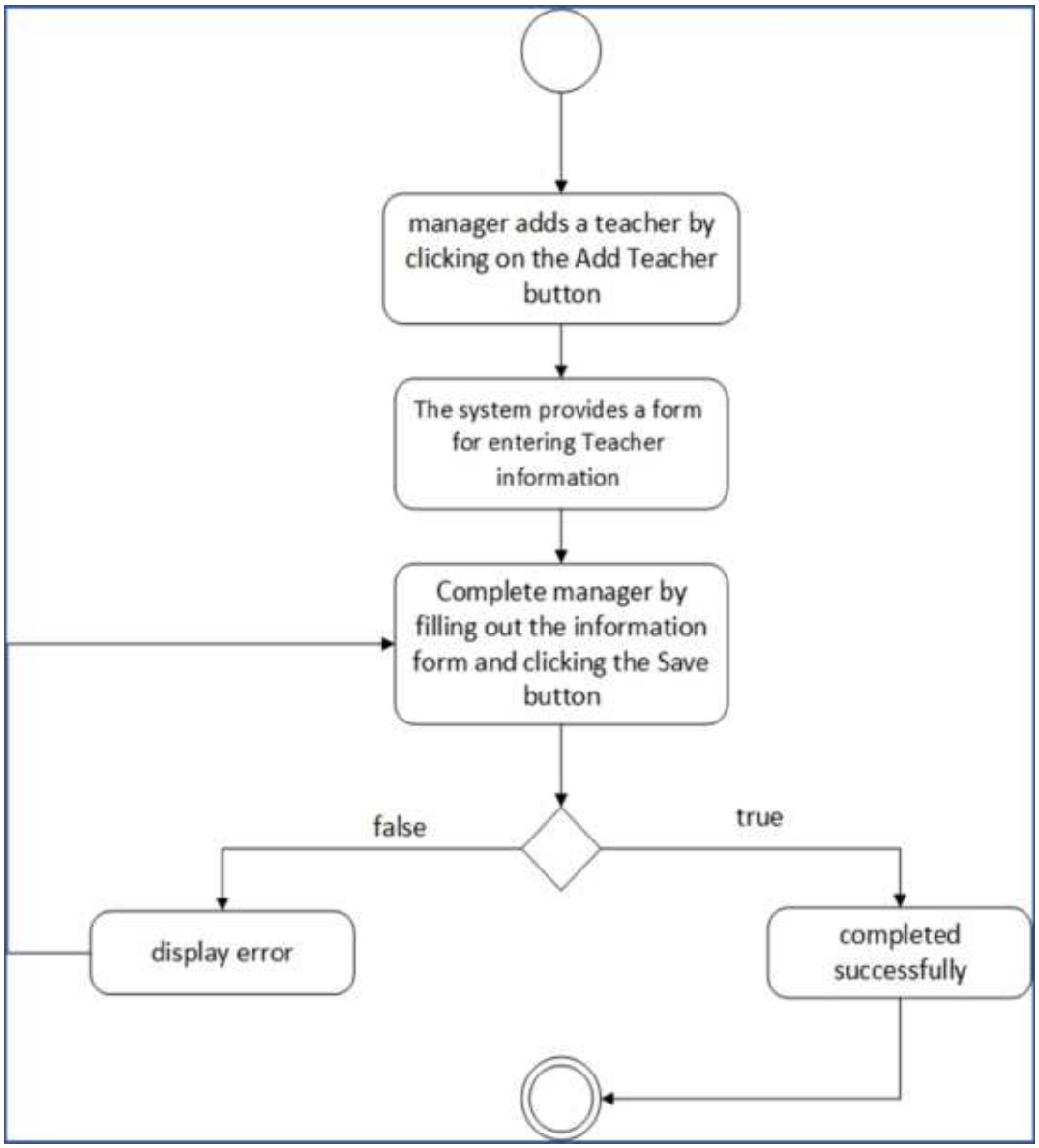


Figure 16. Add Teacher Activity diagram

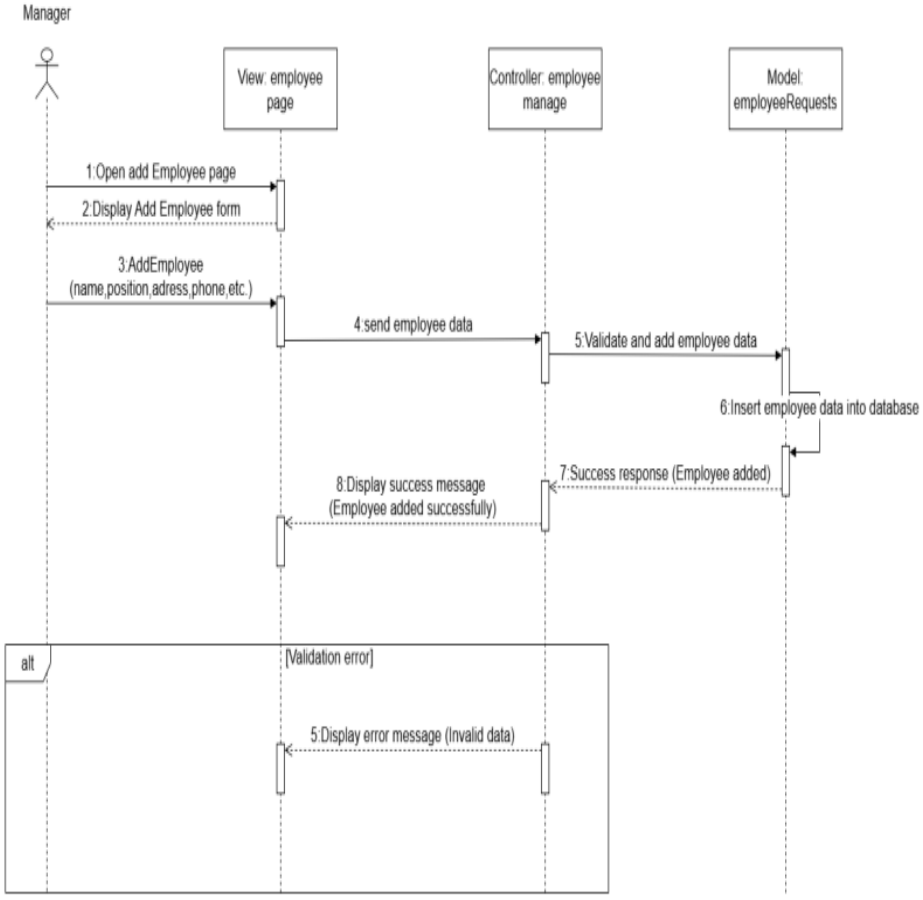


Figure 17. Add Teacher Sequences diagram

6. Edit information teacher

ID	SCMS-6
Description	Edit information teacher
Actors	Manager
Preconditions	• manager must have an account in the system • Academic year and grade data must be accurate and up-to-date in the system.
Main path	1. User click on Edit bottom in teacher profile 2. System display Edit form and asks manager to edits data 3. enter a new data 4. System validates a new data and show anew information
Subsequent terms	Updating course information throughout the system
Alternate path	If the teacher's information is duplicate, a message appears and the information is re-entered

Table 14. Use Case Specification (Edit information teacher)

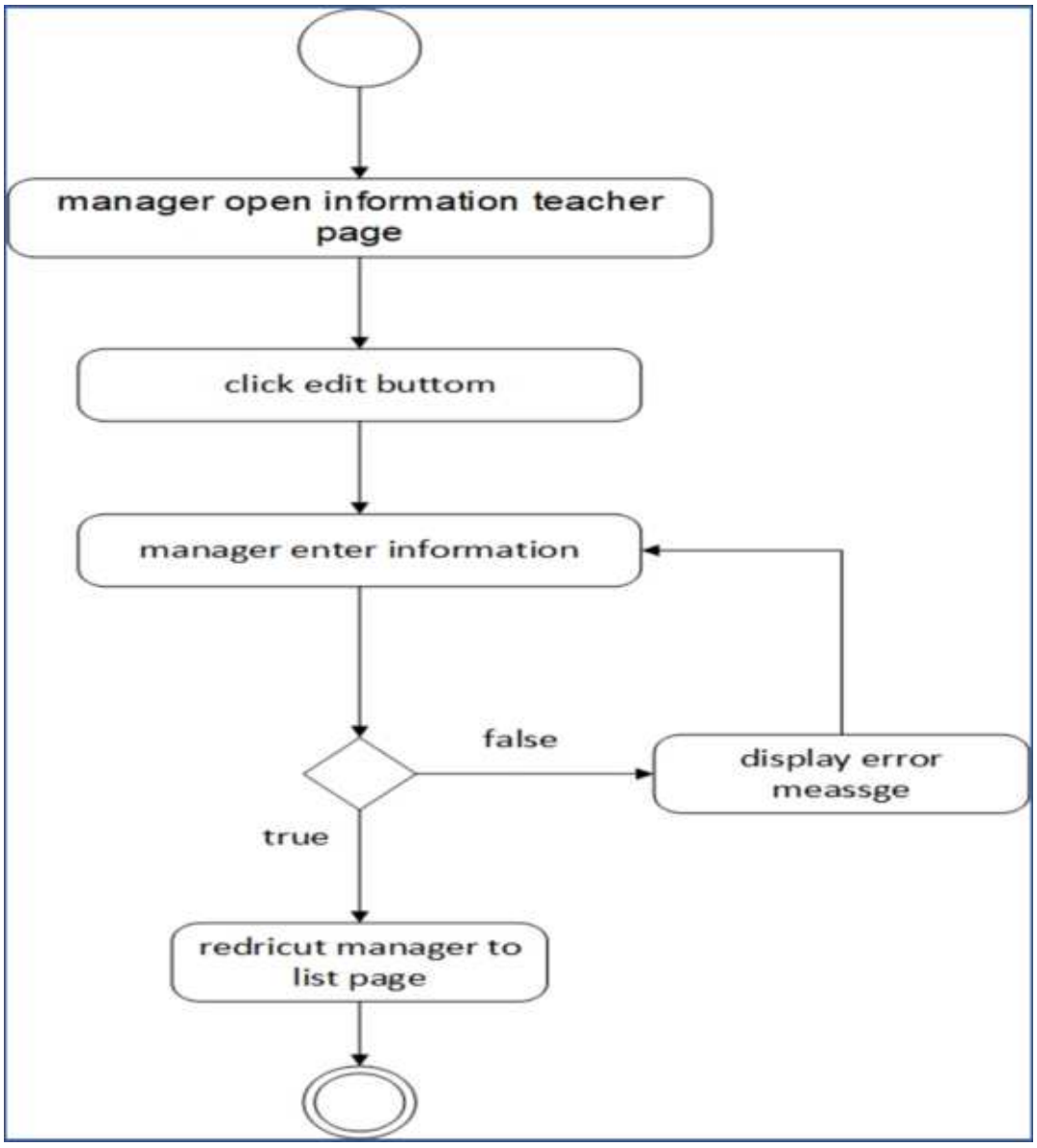


Figure 18. Edit information teacher Activity diagram

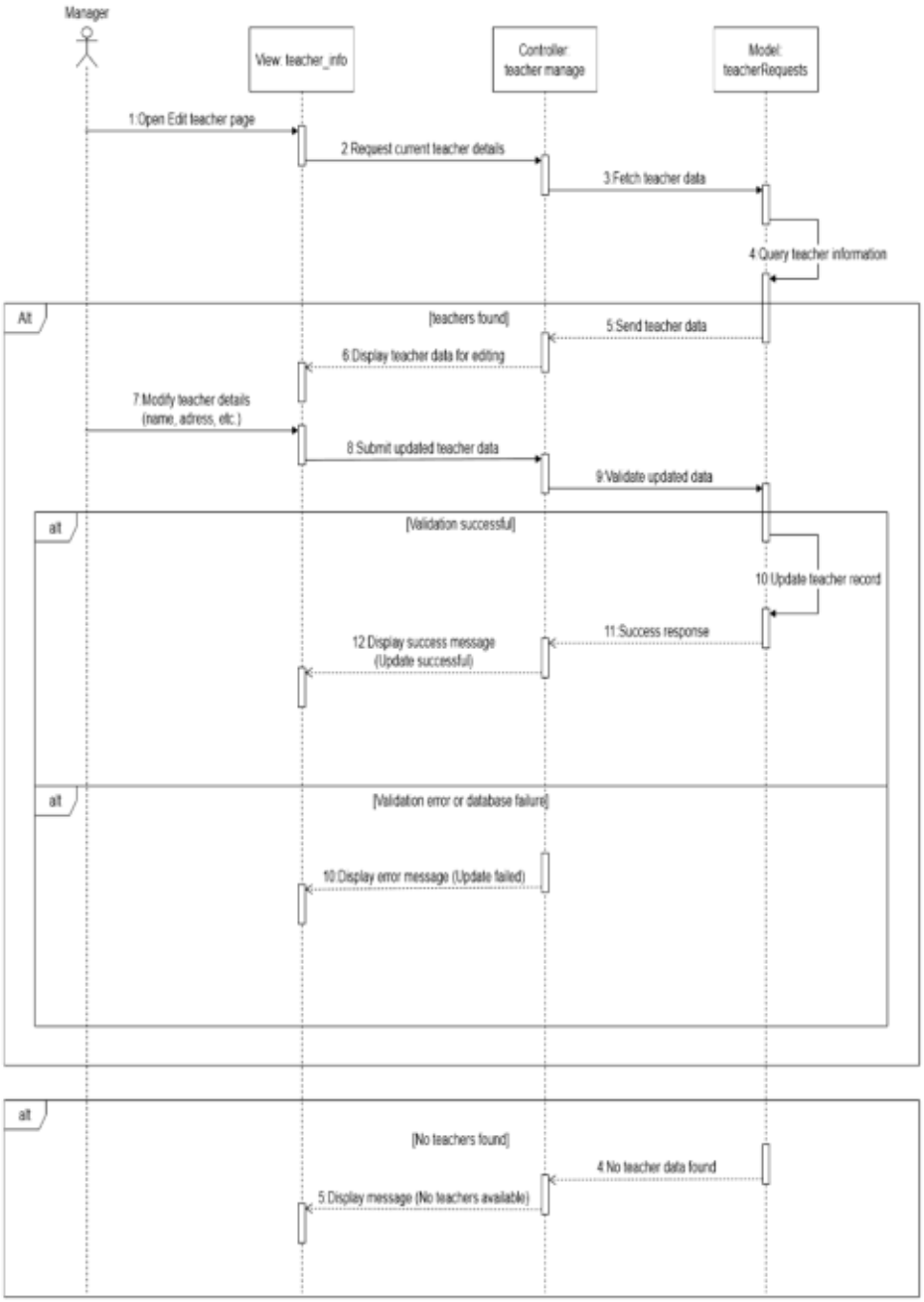


Figure 19. Edit information teacher Sequences diagram

7. Delete Teacher

ID	SCMS-7
Description	Delete teacher
Actors	manger
Preconditions	The manager must have an account to log in to the system
Main path	1. The manger chooses the option to shoe teacher list. 2. The manager clicks on the delete button accompanying each teacher 3. Deletes the teacher and removes him from the teacher list
Subsequent terms	Directing the manager to the teacher list page.
Alternate path	Updating teacher information throughout the system

Table 15. Use Case Specification (Delete teacher)

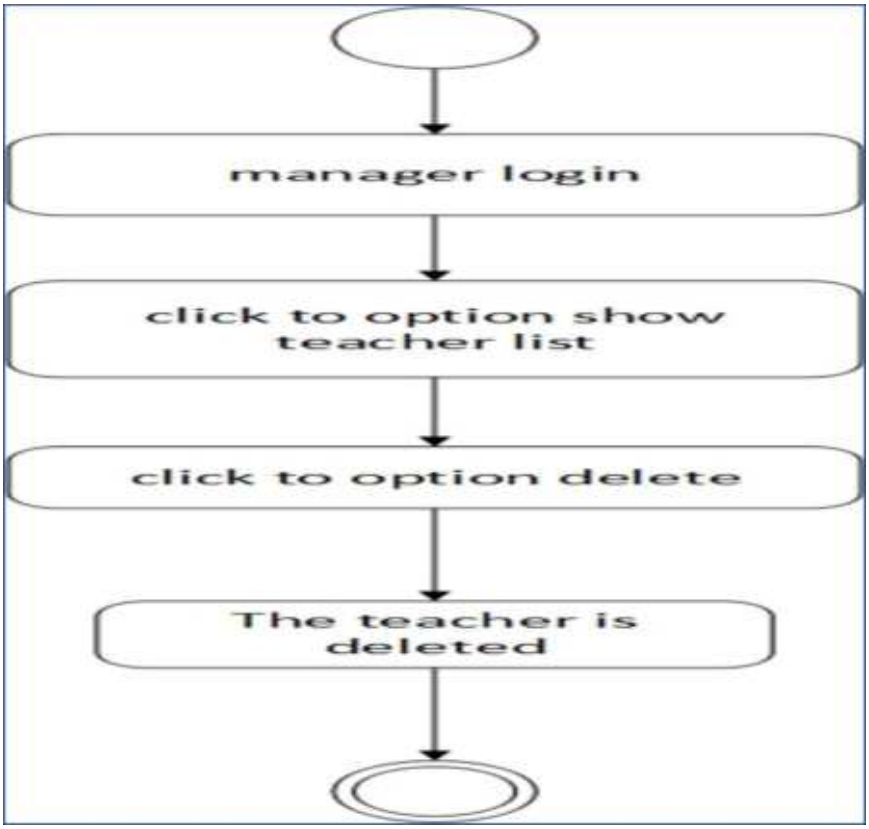


Figure 20. Delete teacher Activity diagram

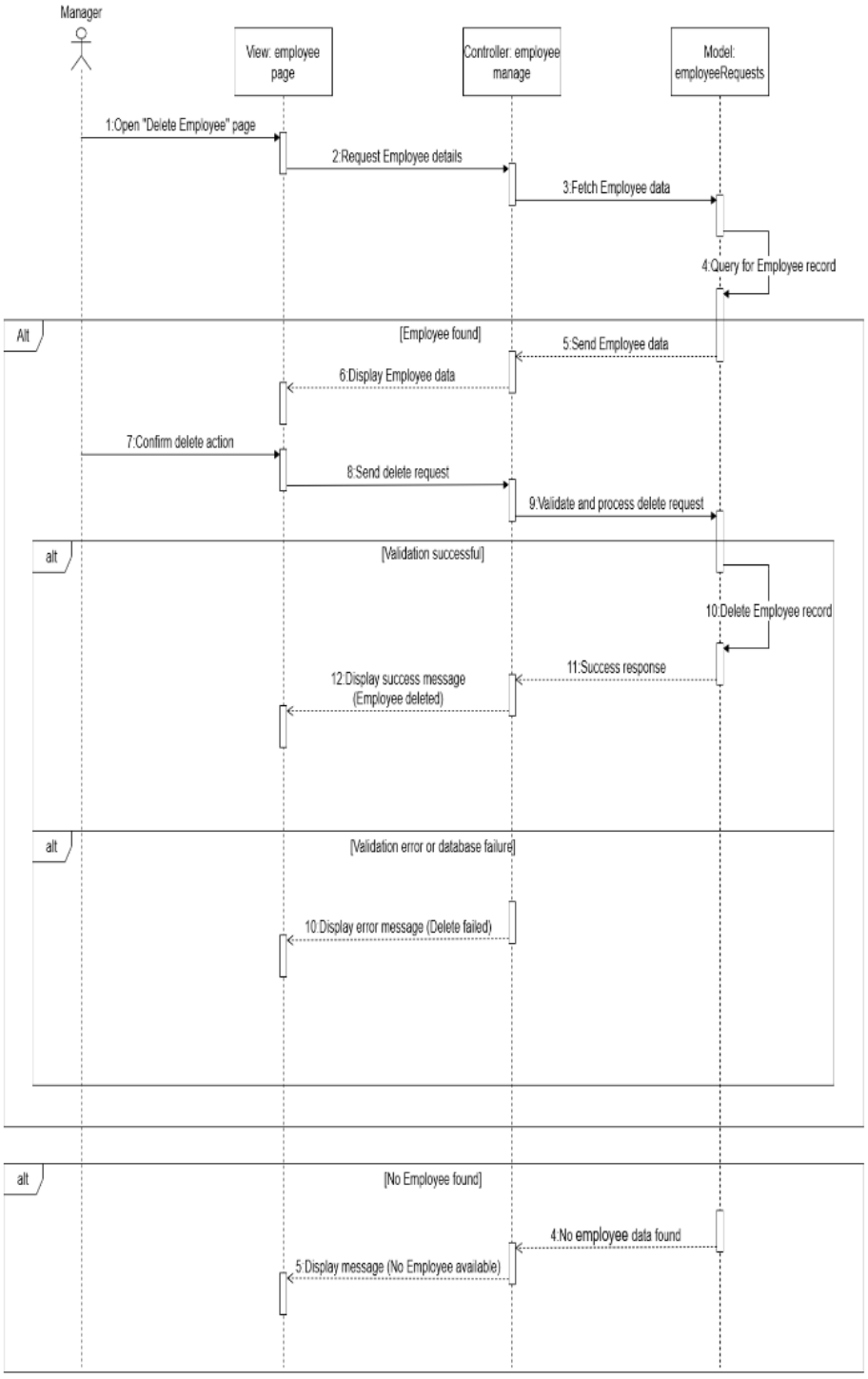


Figure 21. Delete teacher Sequences diagram

8. Log out

ID	SCMS-8
Description	Log out
Actors	user
Preconditions	The system should have a clear button or link to log out
Main path	1- User click on logout bottom 2- System displays a massage and asked user to conform the process 3- User conform the process 4-System redirect user to client page
Subsequent terms	The user is blocked from accessing any system resources until he logs in again

Table 16. Use Case Specification (Log out)

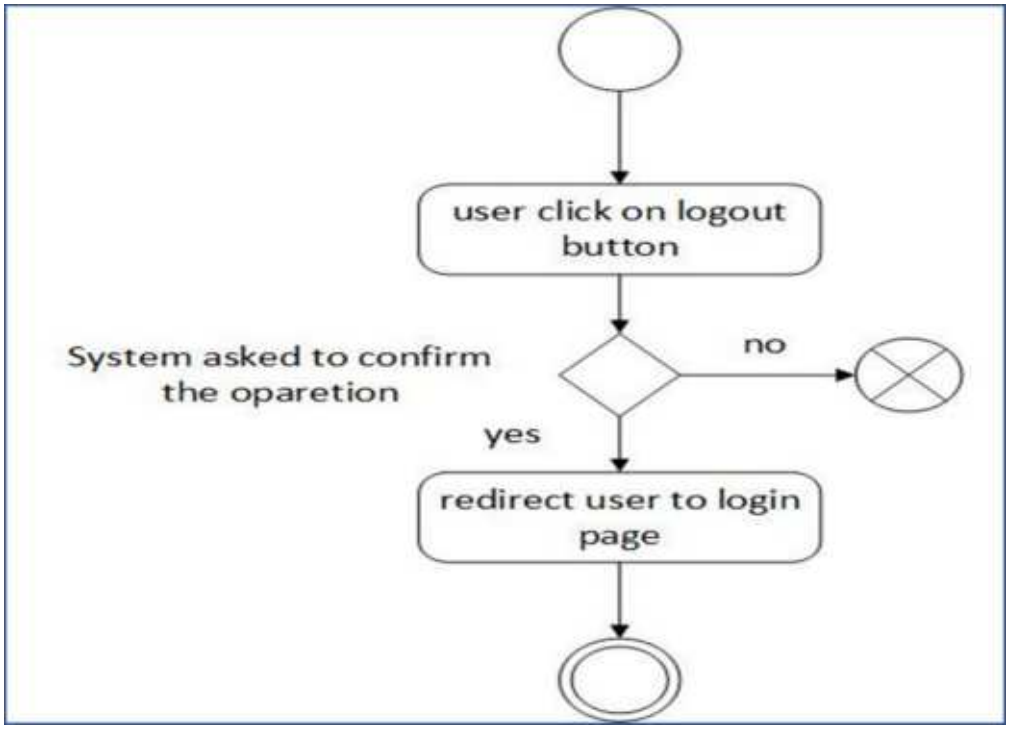


Figure 22. Log out Activity diagram

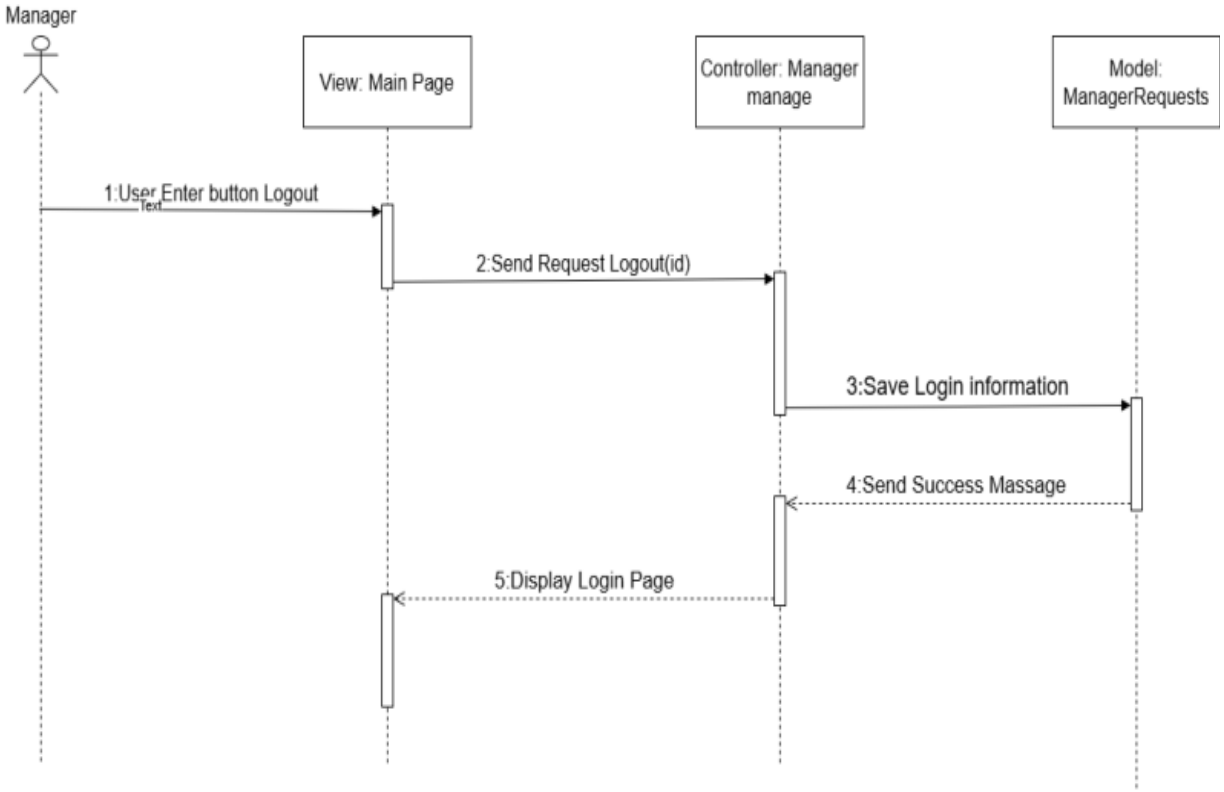


Figure 23. Log out Sequences diagram

9. Show Employee list

ID	SCMS-9
Description	Show Employee list
Actors	manager
Preconditions	• The manager must have an account to log in to the system • The system must be available
Main path	3) The manager clicks on the option to show Employee list 4) Directing the manager to the Employee list page.
Subsequent terms	Not found
Alternate path	Not found

Table 17. Use Case Specification (Show Employee list)

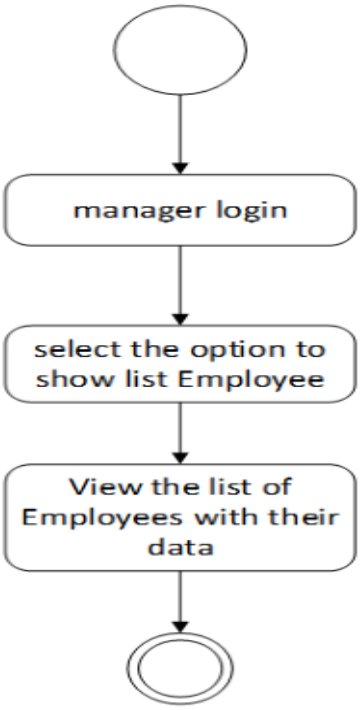


Figure 24. Show Employee list Activity diagram

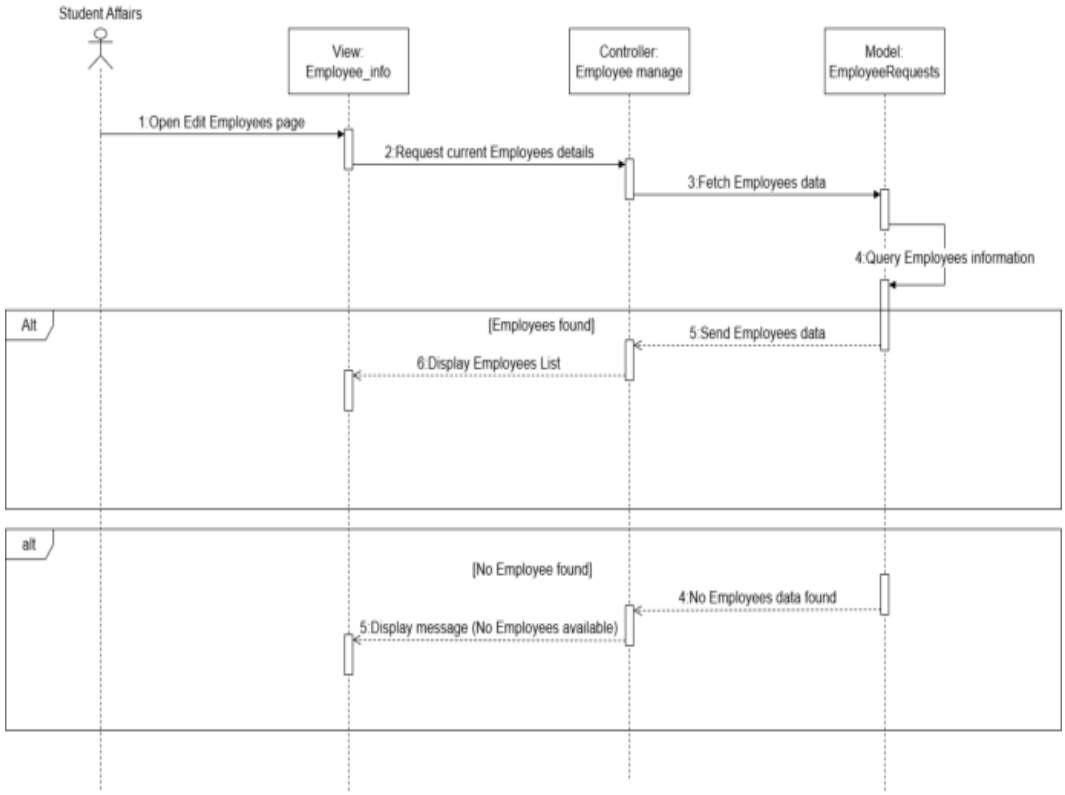


Figure 25. Show Employee list Sequences diagram

10.Add Employee

ID	SCMS-10
Description	Add Employee
Actors	manager
Preconditions	• manager must have an account in the system and access to the Add Employee functionality
Main path	7. manager accesses the function of adding Employee in the system. 8. The system provides a form for entering Employee information, including: Personal data, contact information, employment information 9. manager completes the information form. 10. registration employee clicks the “Save” button to add the employee to the system. 11. The system verifies the accuracy of the information entered 12. If the information is correct, the Employee is added to the system
Subsequent terms	Updating course information throughout the system
Alternate path	If the Teacher information is incorrect, a message appears and the information is re-entered and go to the step"3"

Table 18. Use Case Specification (Add Employee)

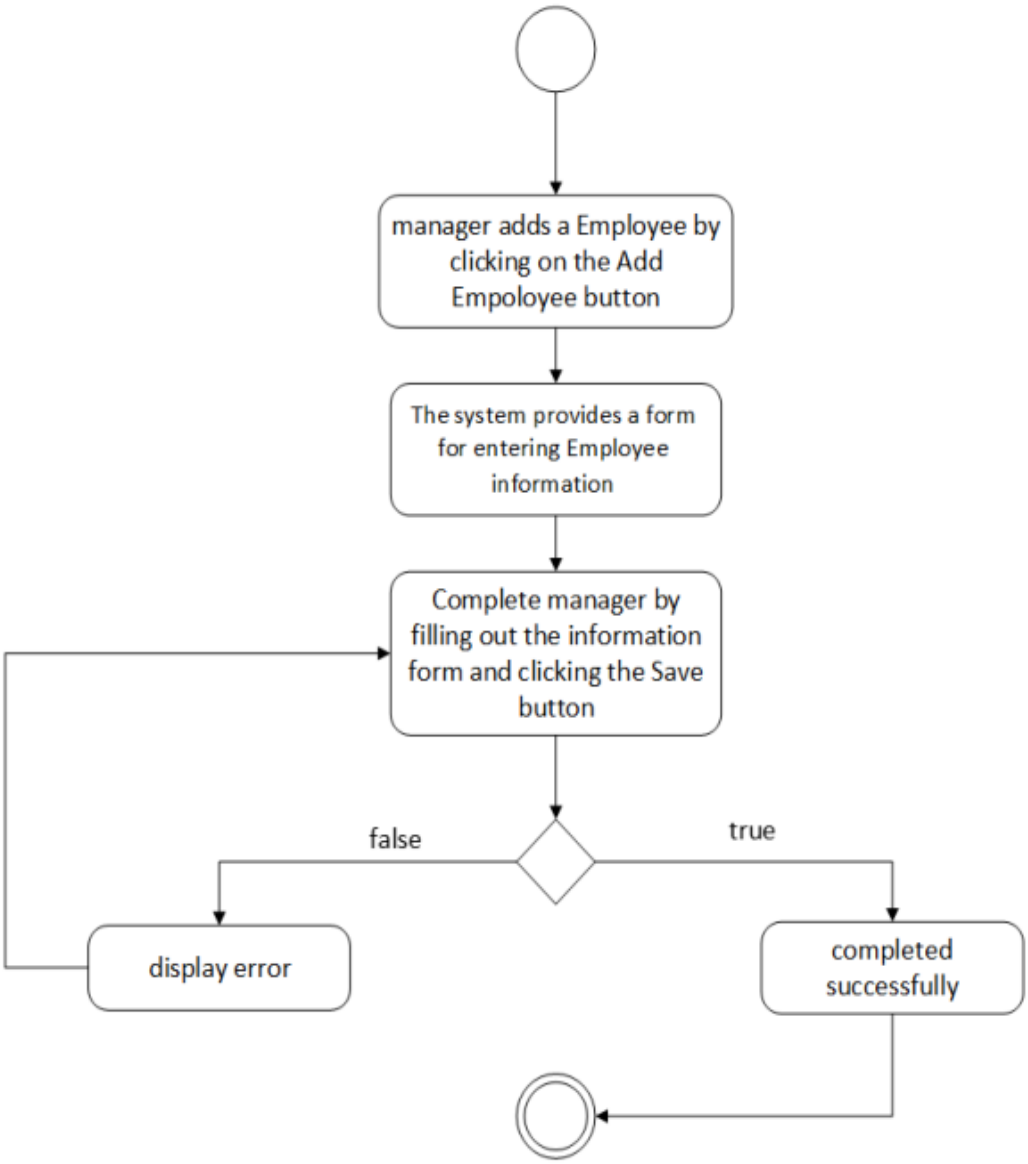


Figure 26. Add Employee Activity diagram

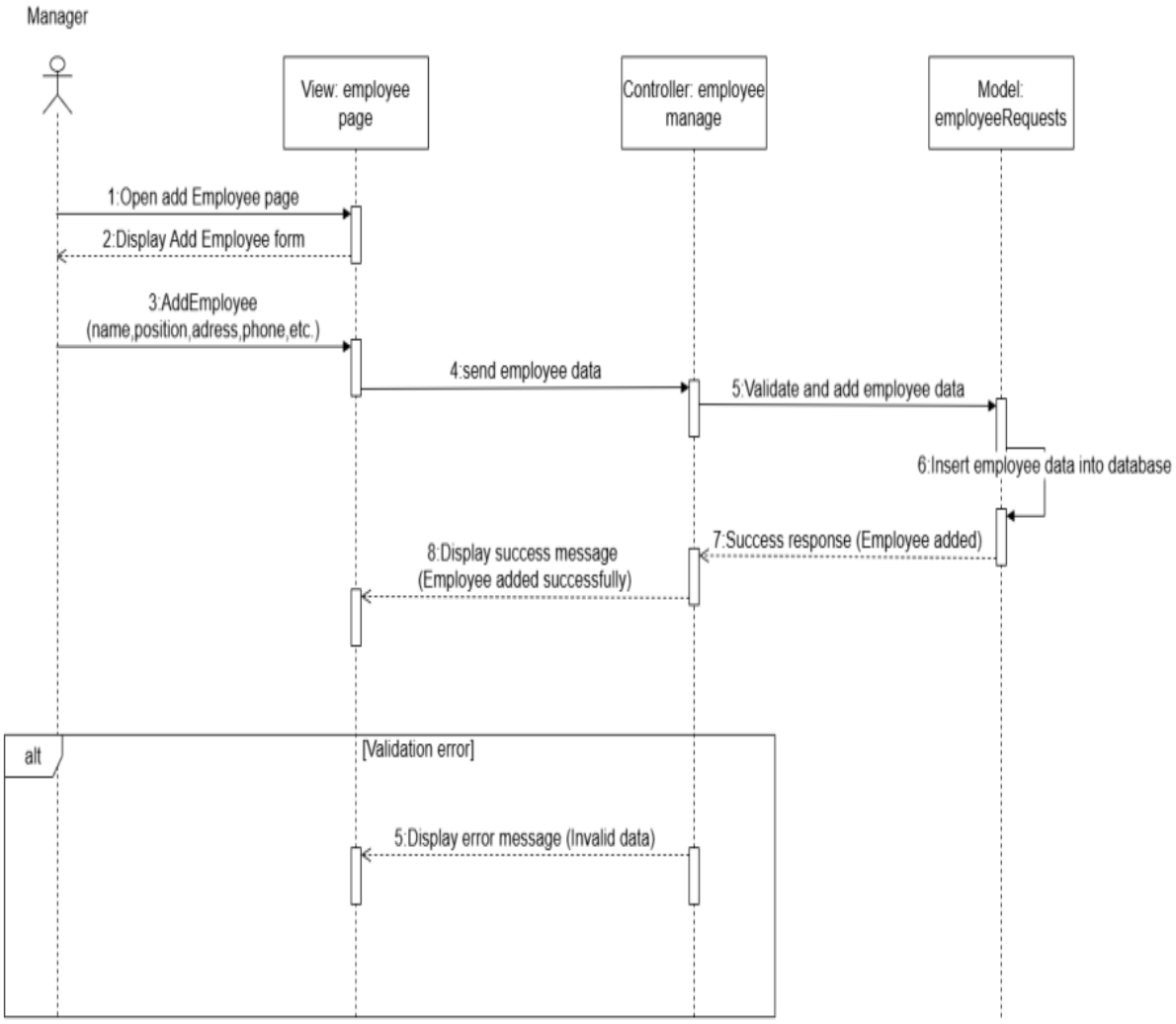


Figure 27. Add Employee Sequences diagram

11.Edit Information Employee

ID	SCMS-11
Description	Edit Information Employee
Actors	Manager
Preconditions	• manager must have an account in the system • Academic year and grade data must be accurate and up-to-date in the system.
Main path	1. Manager click on Edit bottom in teacher profile 2. System display Edit form and asks manager to edits data 3. enter a new data 4. System validates a new data and show anew information
Subsequent terms	Updating course information throughout the system
Alternate path	If the Employee's information is duplicate, a message appears and the information is re-entered and go to the step"3"

Table 19. Use Case Specification (Edit Information Employee)

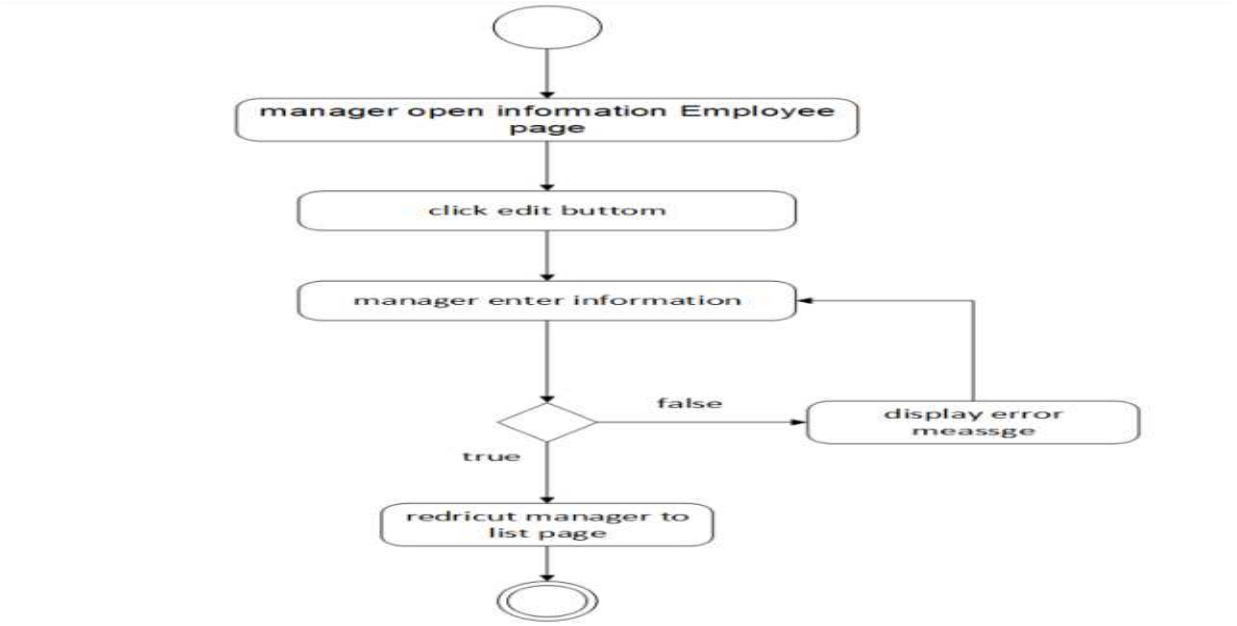


Figure 28. Edit Information Employee Activity diagram

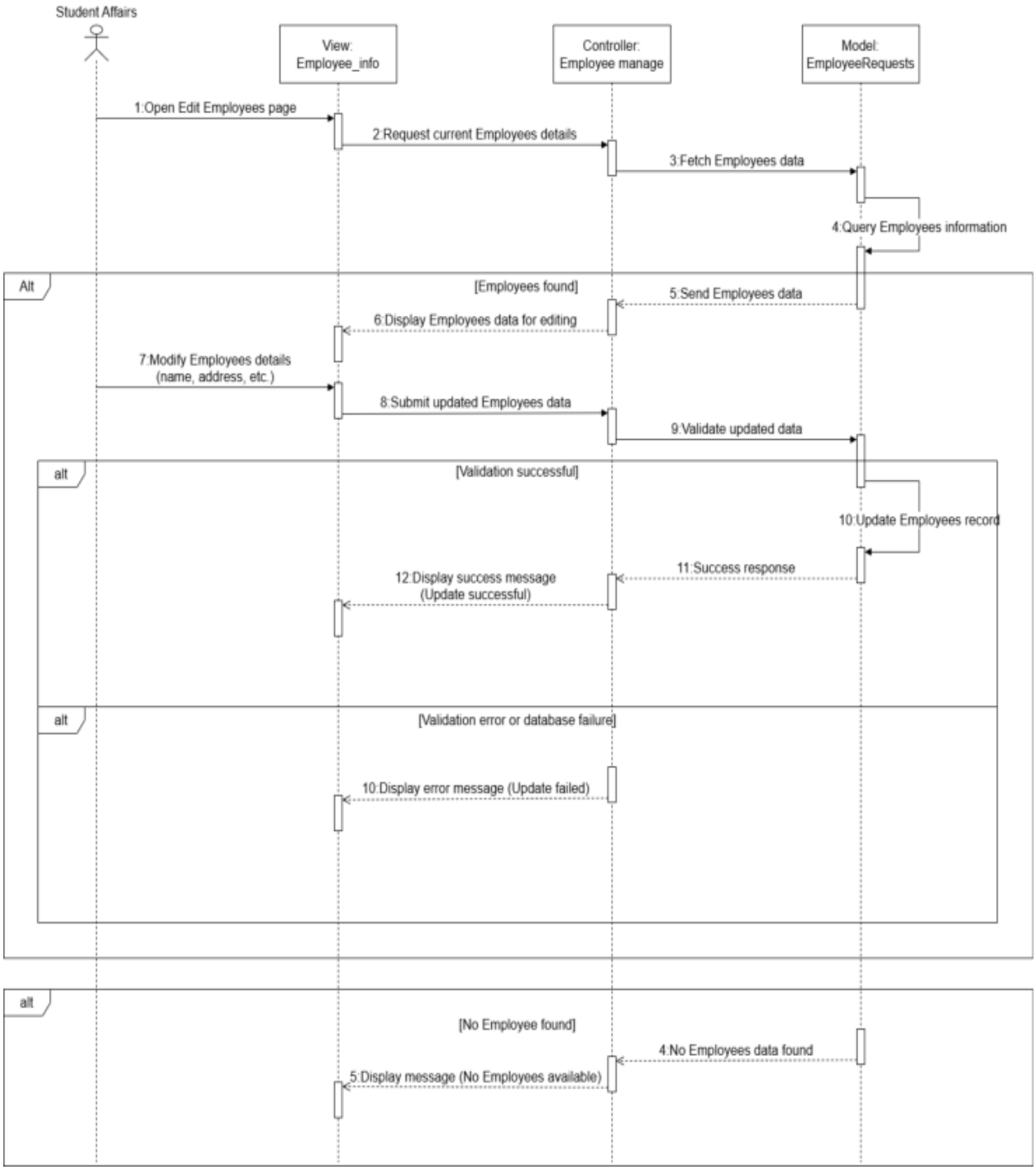


Figure 29. Edit Information Employee Sequences diagram

12.Delete Employee

ID	SCMS-12
Description	Delete Employee
Actors	manger
Preconditions	The manager must have an account to log in to the system
Main path	1. The manger chooses the option to shoe Employee list. 2. The manager clicks on the delete button accompanying each Employee 3. Deletes the Employee and removes him from the Employee list
Subsequent terms	Directing the manager to the Employee list page.
Alternate path	Updating teacher information throughout the system

Table 20. Use Case Specification (Delete Employee)

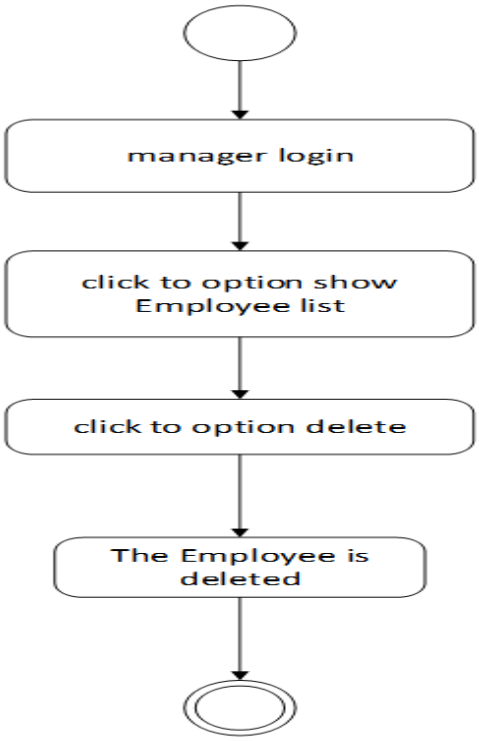


Figure 30. Delete Employee Activity diagram

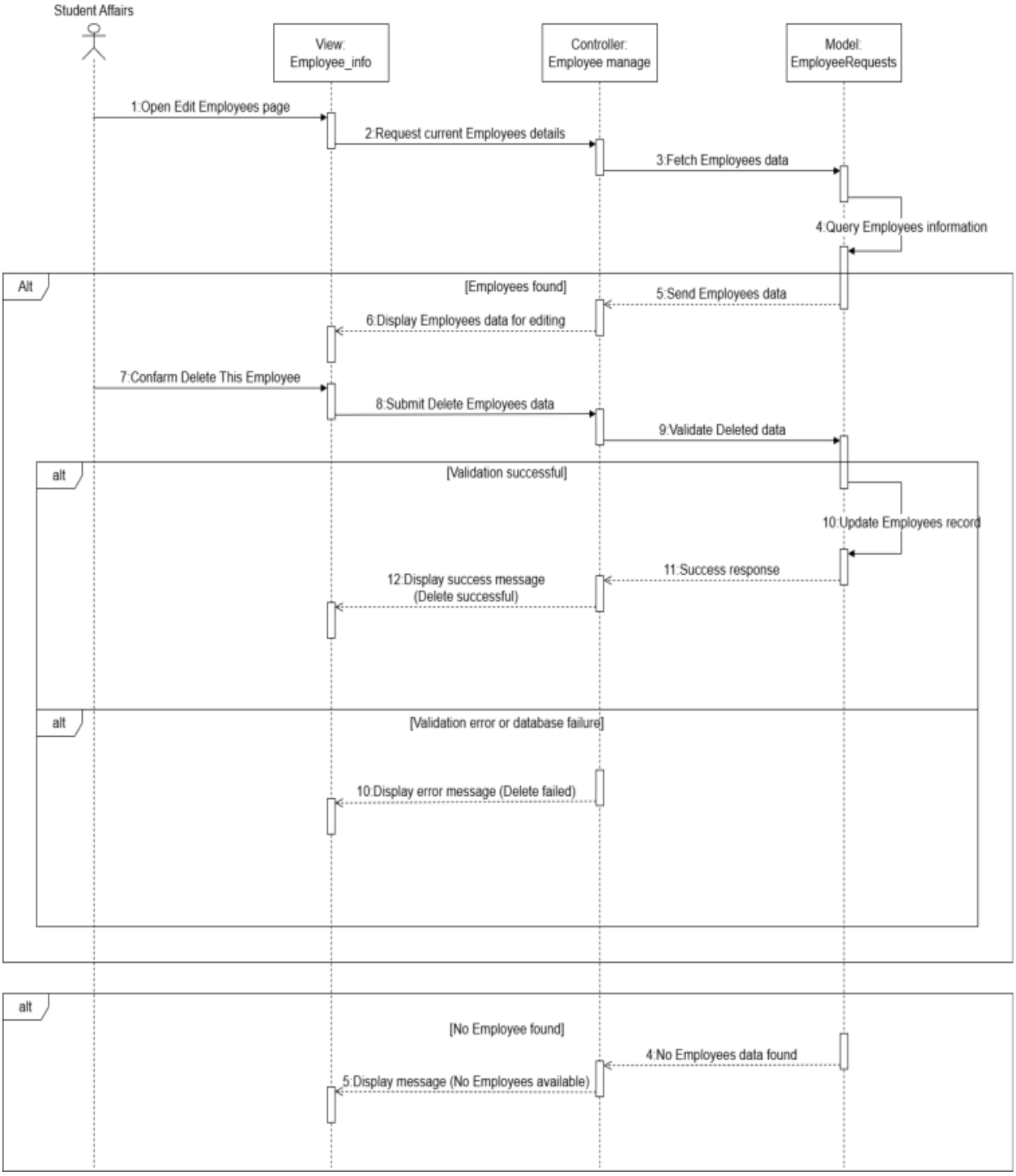


Figure 31. Delete Employee Sequences diagram

13.Search

ID	SCMS-13
Description	Search
Actors	Manager, Employee
Preconditions	The Manager, Employee must have an account to log in to the system
Main path	1. The Manager, Employee open the system. 2. The manager and employee choose the option to display the list of employees, teachers or students from the side navbar. 3. The system displays Required list 4. The manager or employee enters the information in the search field (name, national number, academic number) 5. The system displays the employee, teacher or student corresponding to the search information
Subsequent terms	
Alternate path	If the entered information is incorrect, nothing is displayed

Table 21. Use Case Specification (Search)

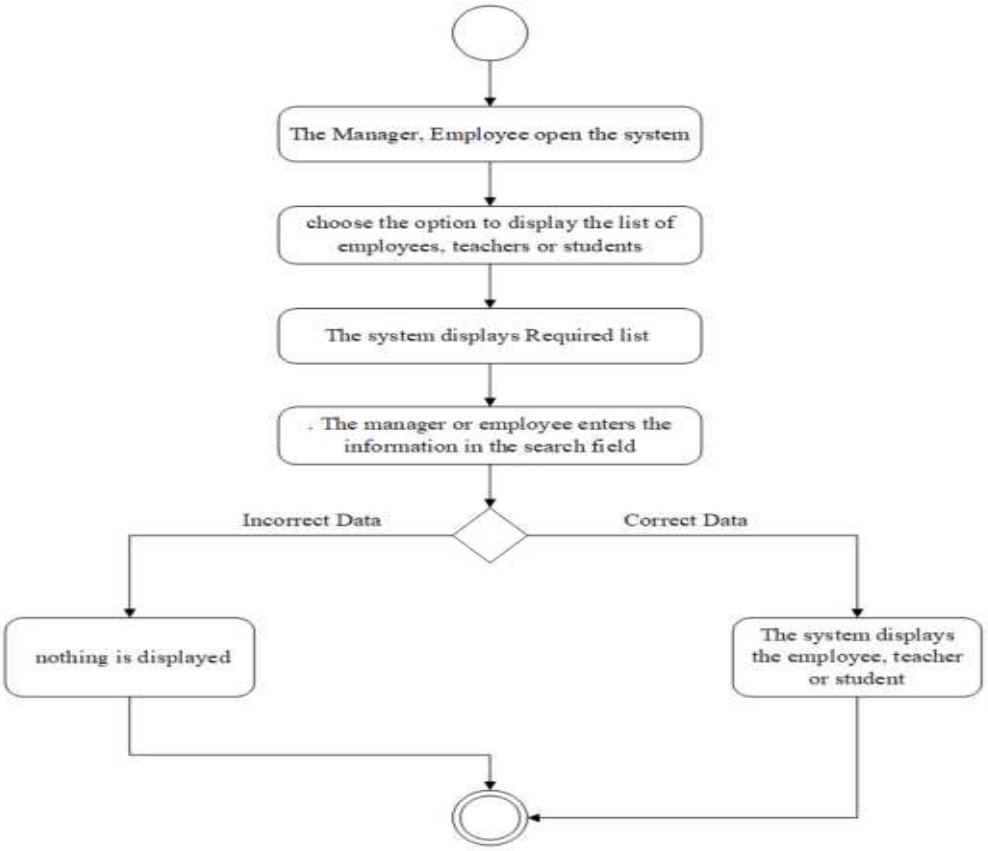


Figure 32. Search Activity diagram

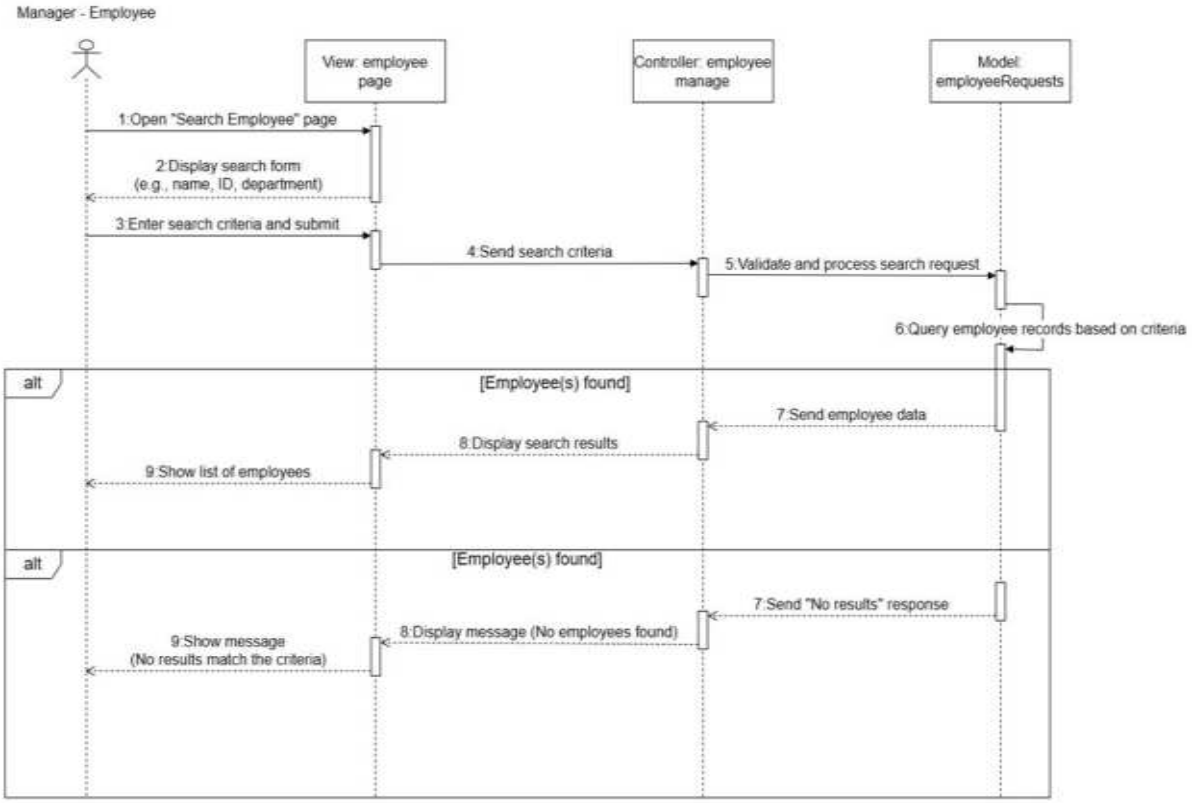


Figure 33. Search Sequences diagram

14.Create Account manager

ID	SCMS-14
Description	Create Account manager
Actors	Manager
Preconditions	The system must not have an account for the manager
Main path	1. The Manager open the system. 2. The Manager chooses create account. 3. The system displays an account creation form 3. The manager enters his account email and password and confirms them. 4. The system directs the manager to the dashboard
Subsequent terms	If there is an account for the old manager.
Alternate path	it displays an error message on the login page stating that there is an account in the system.

Table 22. Use Case Specification (Create Account manager)

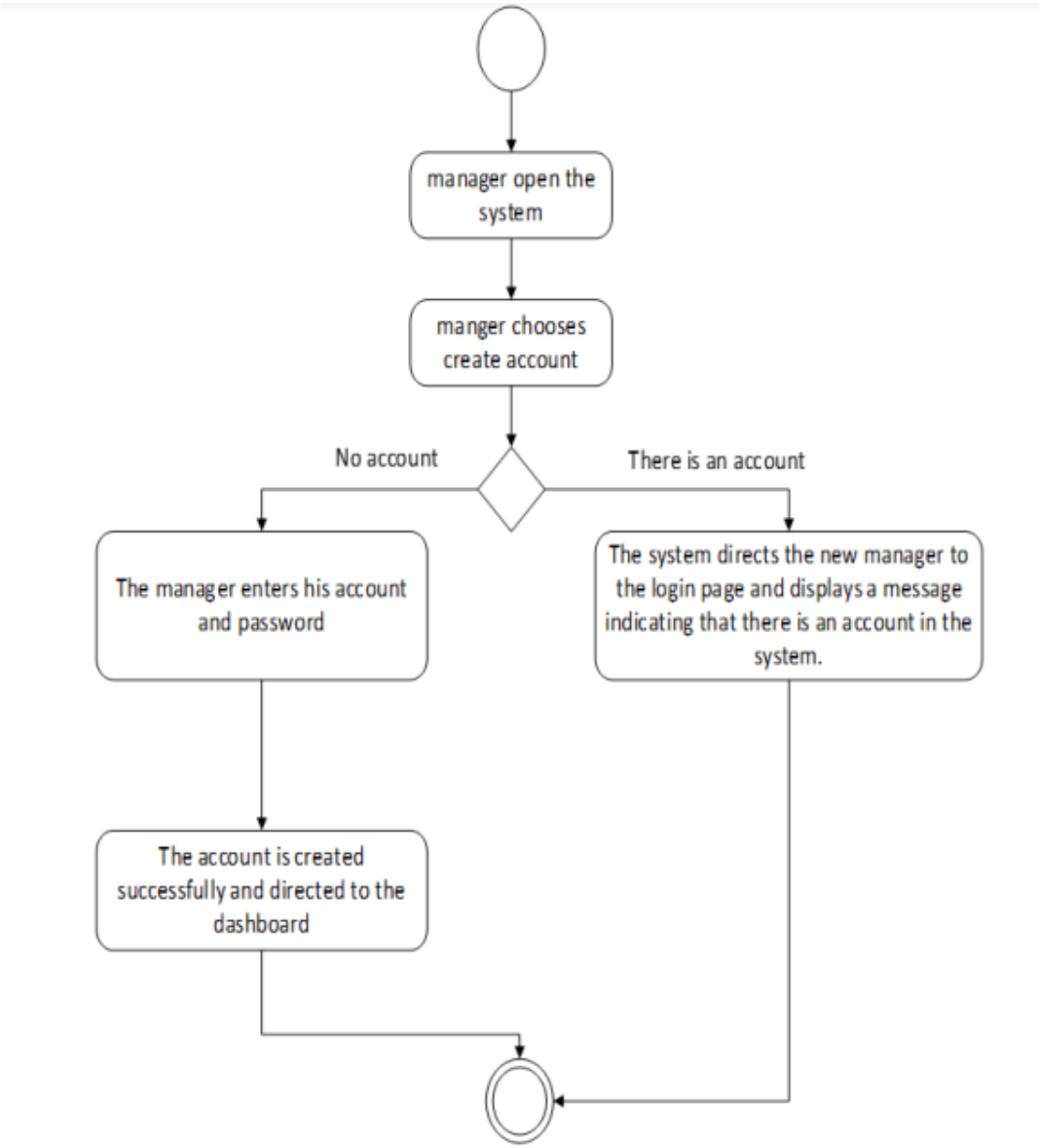


Figure 34 Create Account manager Activity diagram

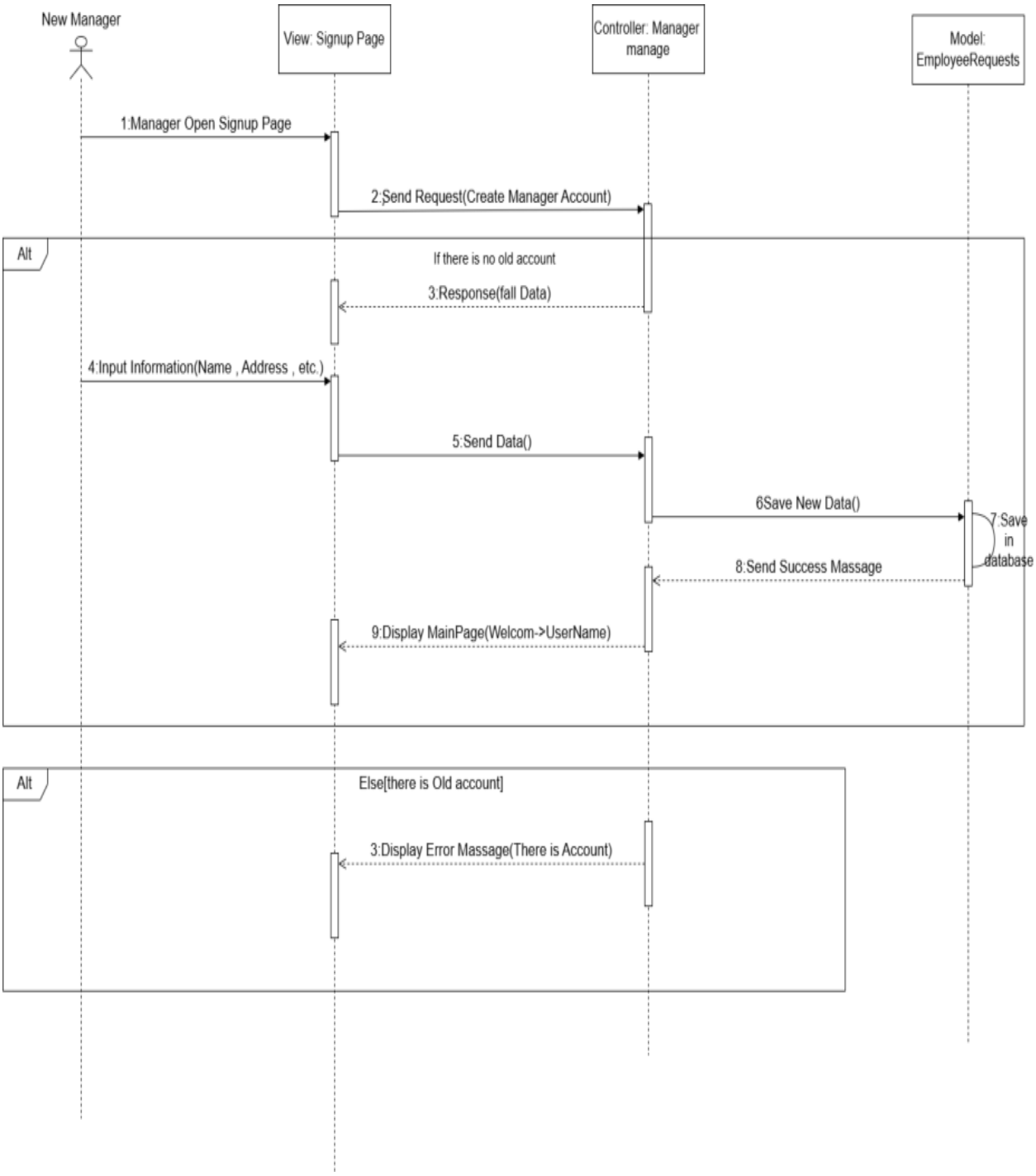


Figure 35. Create Account manager Sequences diagram

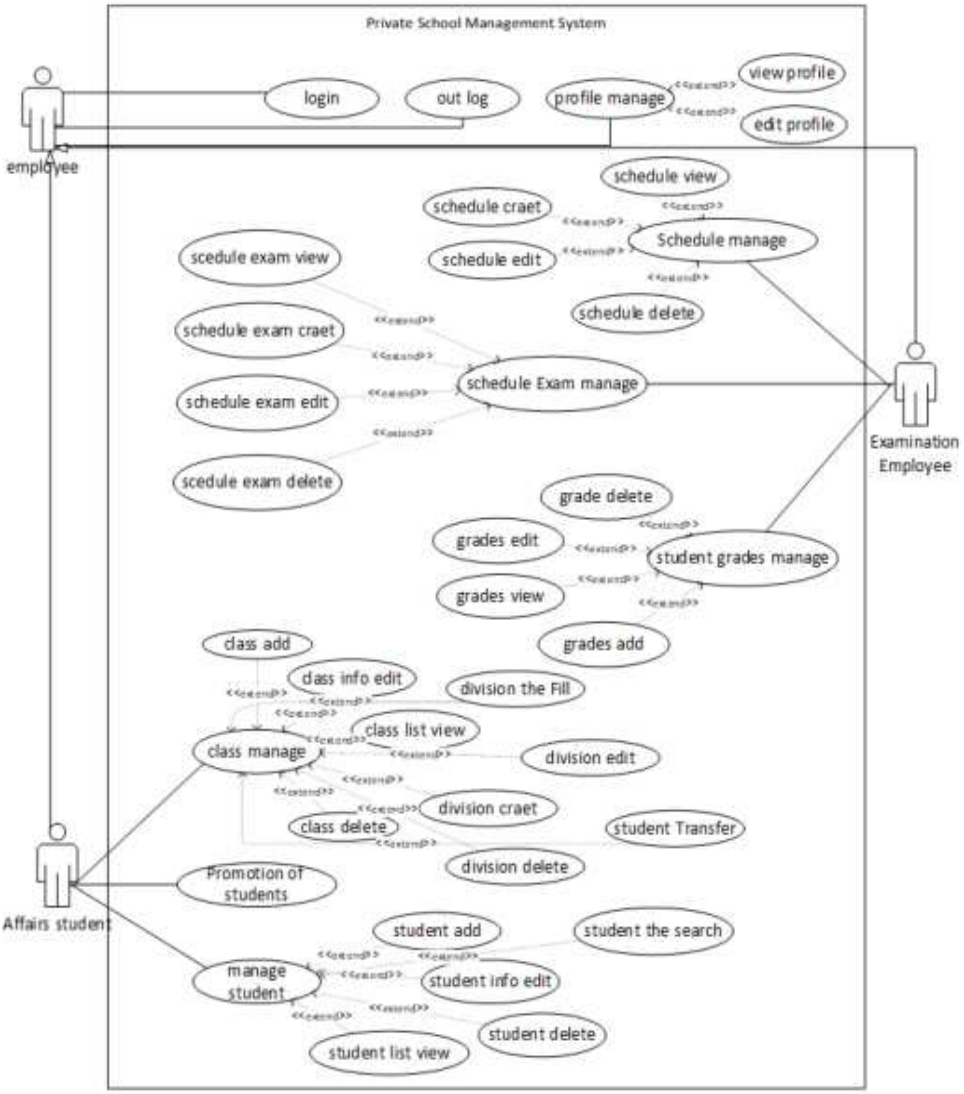


Figure 36. UseCase low level Employee

15.Login

ID	SCMS-15
Description	Login
Actors	Employee
Preconditions	• The Employee must have an account in the system • The Employee must have a valid username and password • The system must be available and accessible
Main path	1. The Employee provides the User name and password to the system 2. The system verifies the validity of the User name and password in the database 3. If the information is correct, the system logs in successfully
Subsequent terms	Redirecting the user to his home page
Alternate path	1. If the information is incorrect, the system sends an error message and directs the user to enter the User name and password again.

Table 23. Use Case Specification (Login)

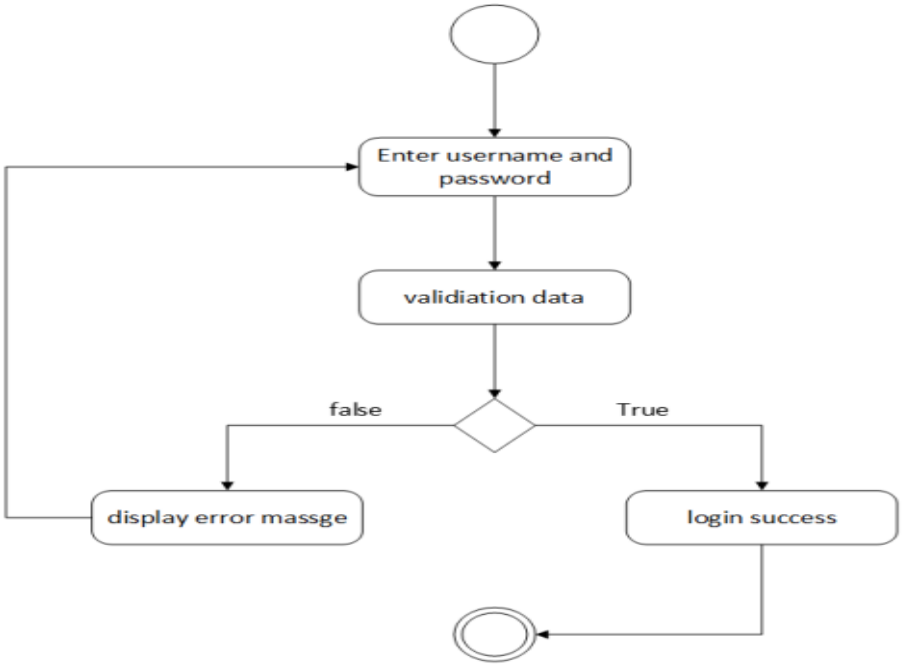


Figure 37 Login Activity diagram

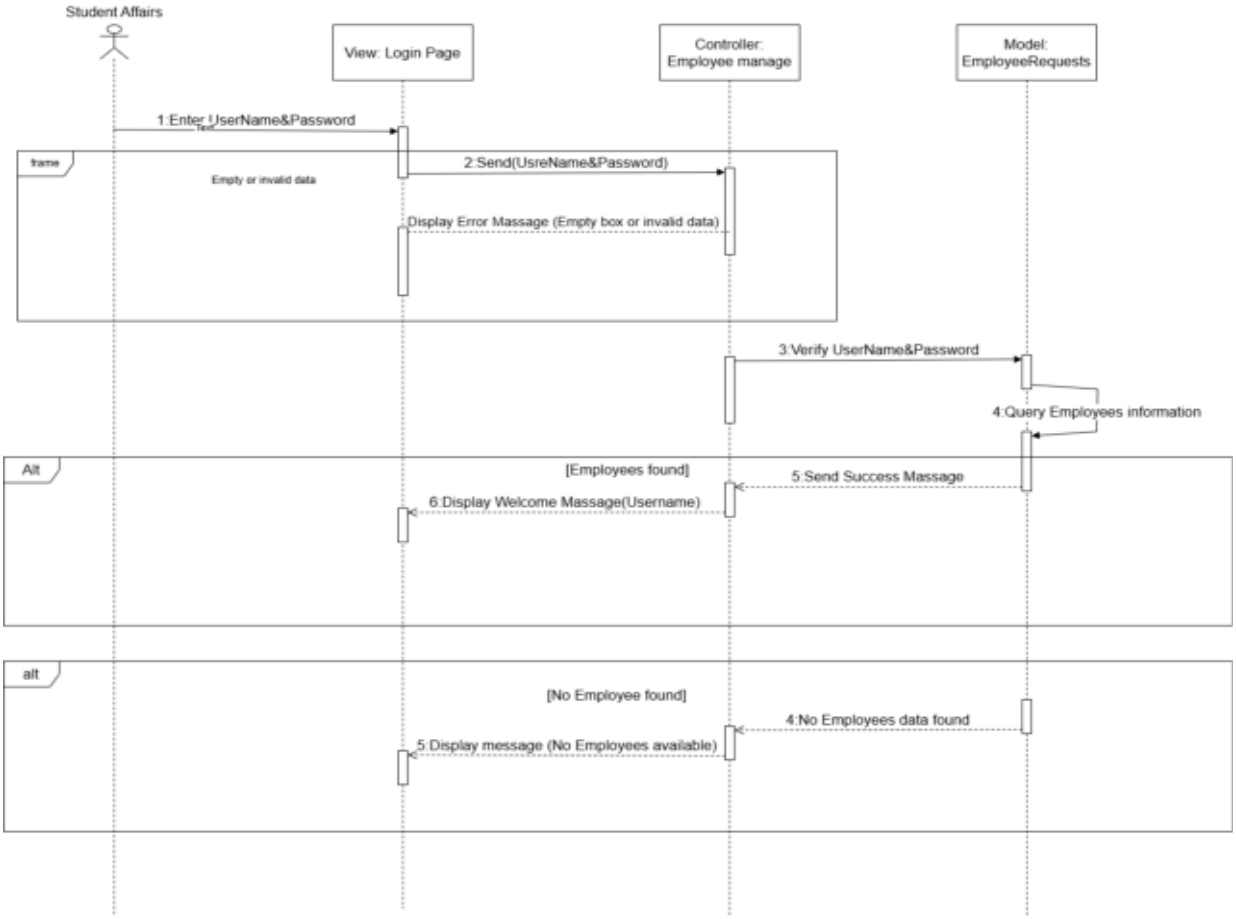


Figure 38. Login Sequences diagram

16.View profile (information personal)

ID	SCMS-16
Description	View profile (information personal)
Actors	Employee
Preconditions	• The Employee must have an account in the system • The Employee must log in to the system
Main path	3- Employee click on My profile link 4- System get data from database and displays profile information
Subsequent terms	

Table 24. Use Case Specification (View profile (information personal))

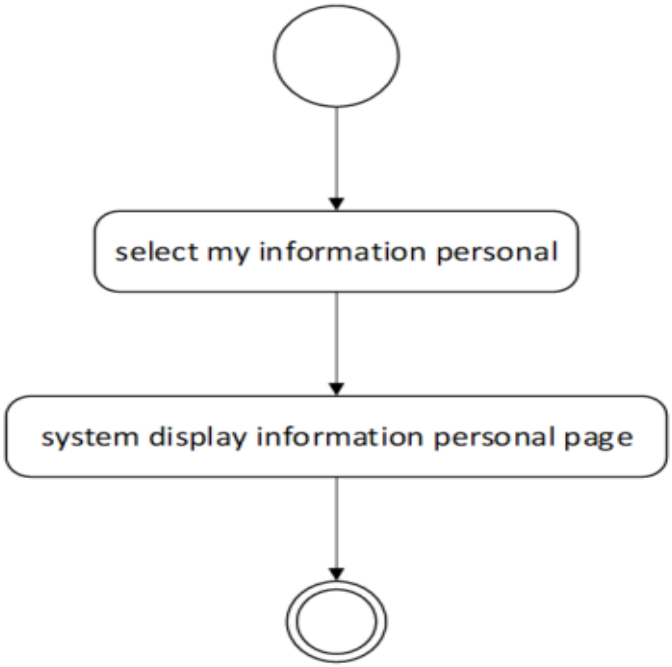


Figure 39. View profile (information personal) Activity diagram

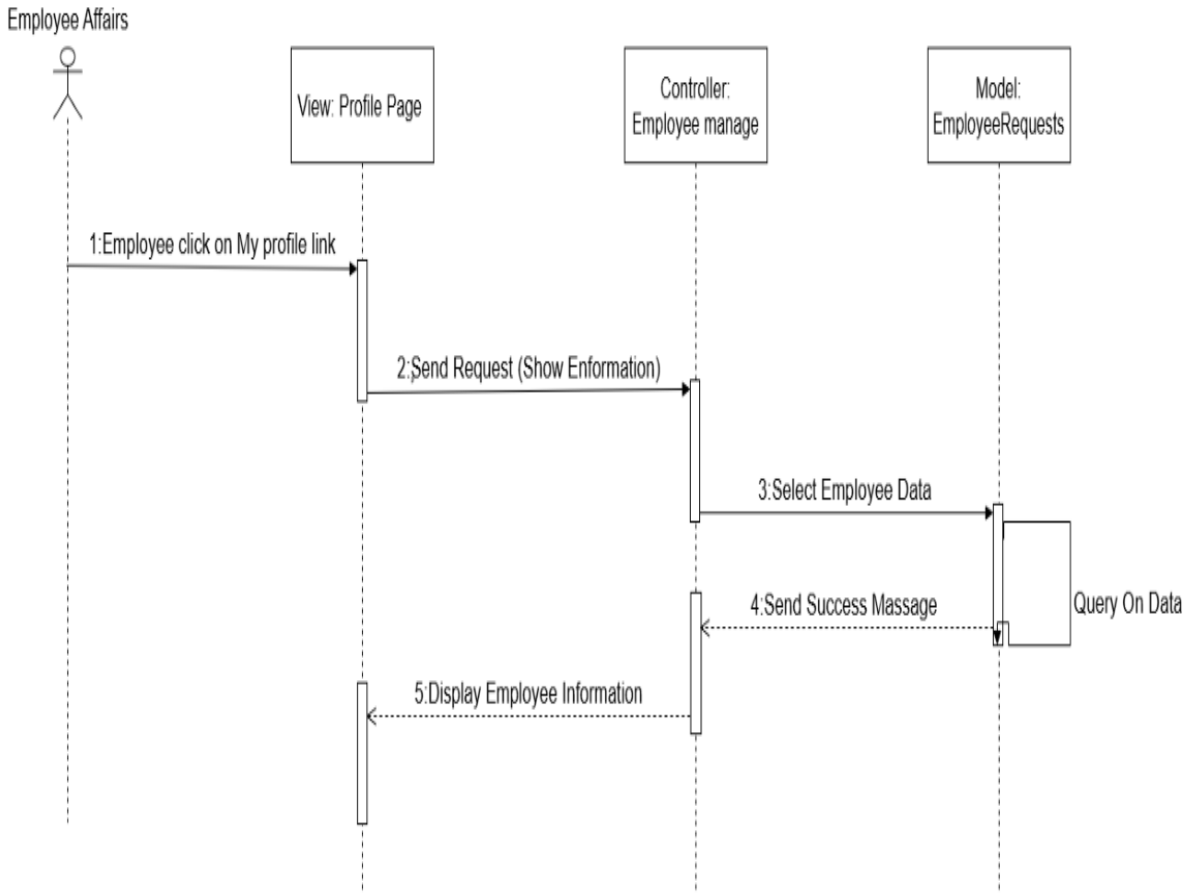


Figure 40. View profile (information personal) Sequences diagram

17.Edit profile (information personal)

ID	SCMS-17
Description	Edit profile (information personal)
Actors	Employee
Preconditions	Employee must have accounts in the system
Main path	1. Employee click on Edit bottom in My profile page 2. System display Edit form and asks user to edits data 3. Employee enter a new data 4. System validates a new data and show anew information
Subsequent terms	Update relevant information throughout the system
Alternate path	Employee enter invalid data -or duplicate phone number and system display an error and go to step '3'

Table 25. Use Case Specification (Edit profile (information personal))

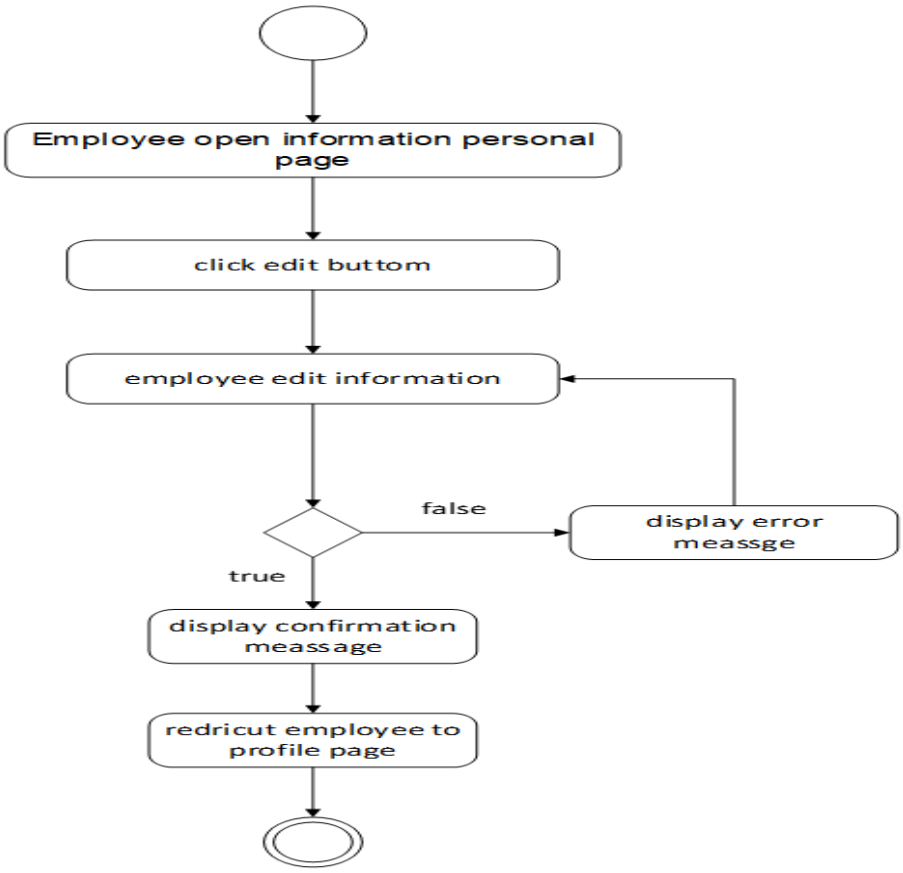


Figure 41. Edit profile (information personal)Activity diagram

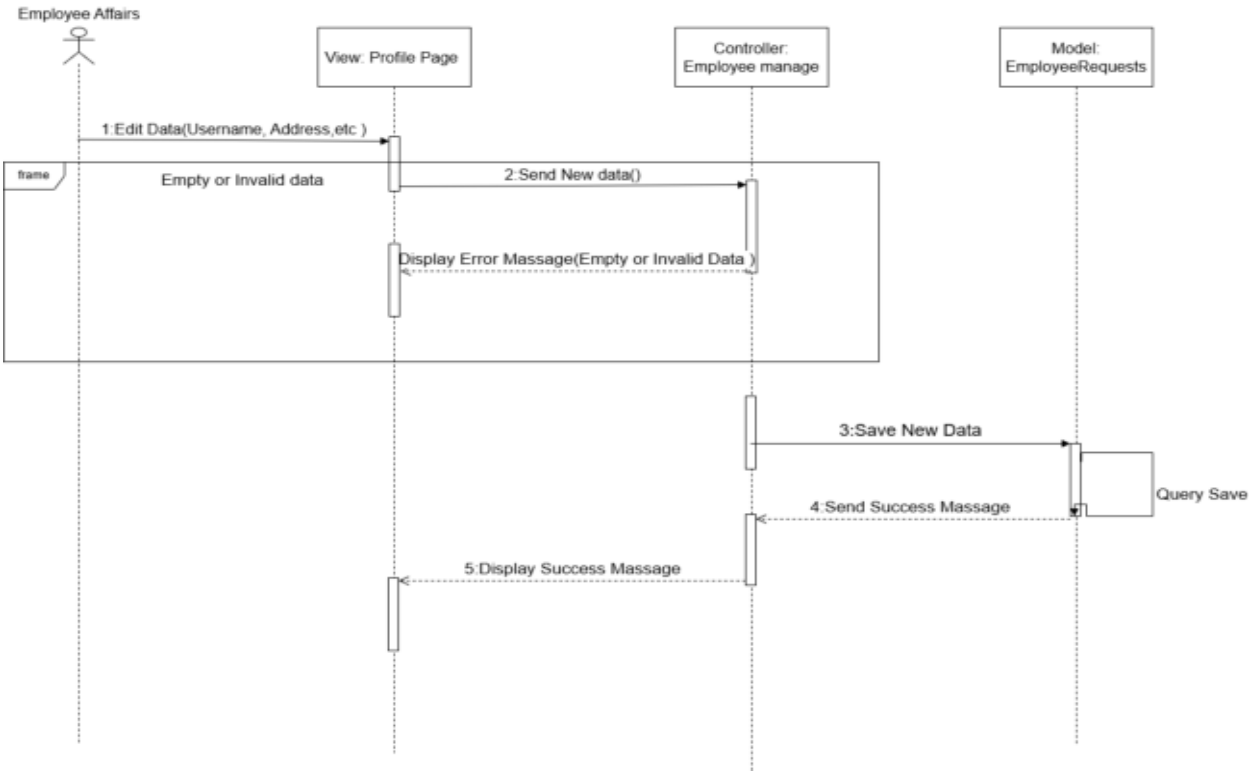


Figure 42. Edit profile (information personal) Sequences diagram

18.Log out

ID	SCMS-18
Description	Log out
Actors	Employee
Preconditions	The system should have a clear button or link to log out
Main path	1- Employee click on logout bottom 2- System displays a massage and asked Employee to conform the process 3- Employee conform the process 4-System redirect Employee to login page
Subsequent terms	The Employee is blocked from accessing any system resources until he logs in again

Table 26. Use Case Specification (Log out)

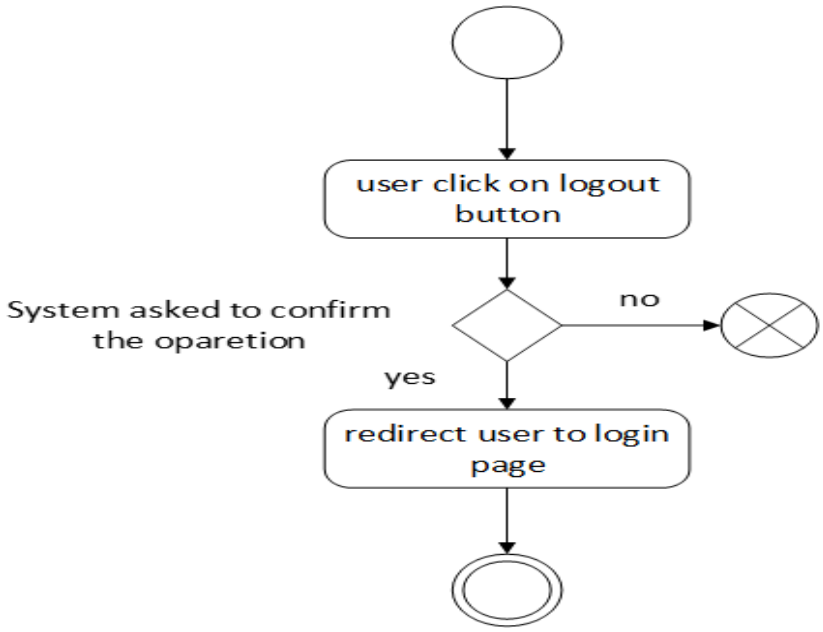


Figure 43. Log out t Activity diagram

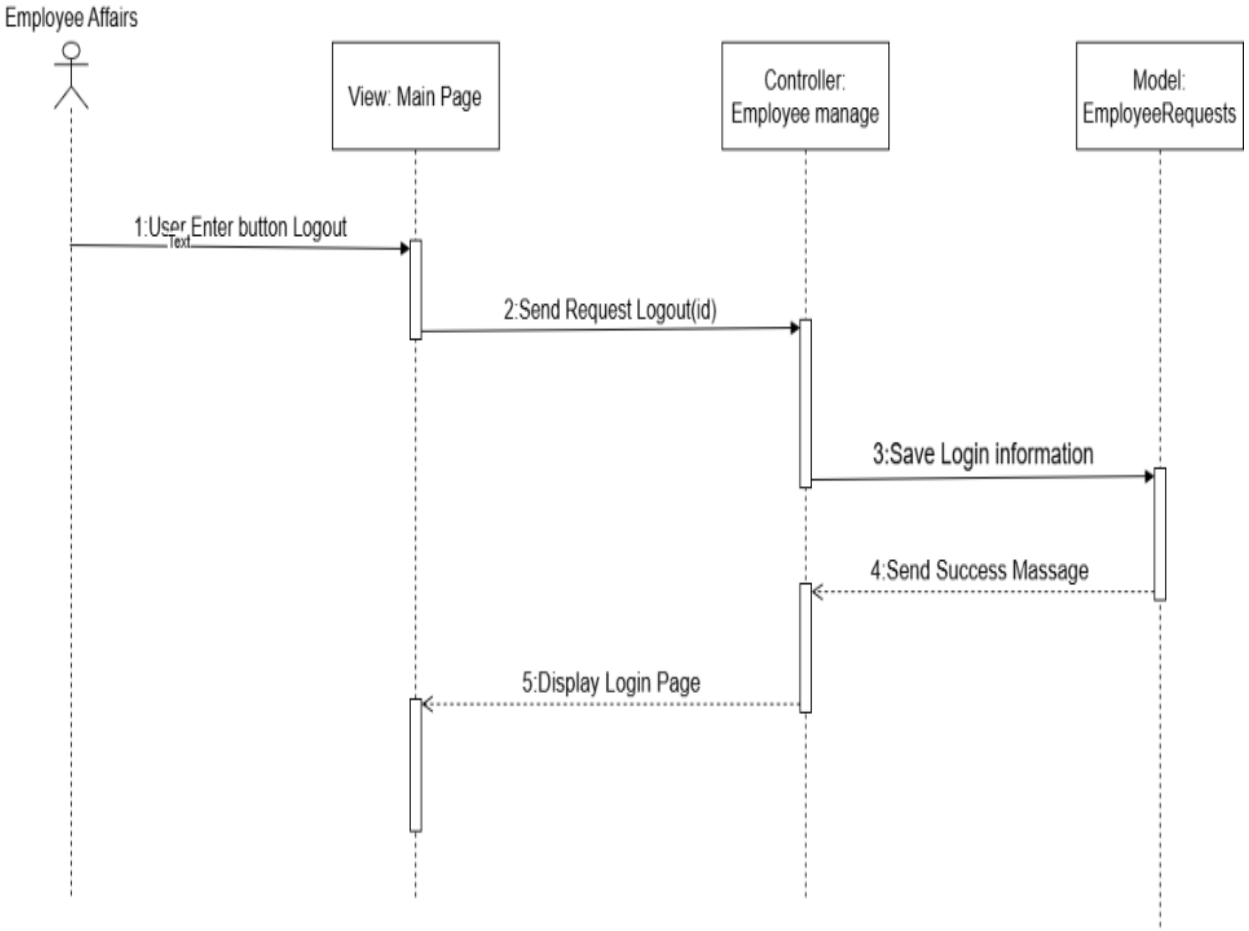


Figure 44. Log out Sequences diagram

19.Show Student list

ID	SCMS-19
Description	Show Student list
Actors	Employee
Preconditions	• The Employee must have an account to log in to the system • The system must be available
Main path	5) The Employee clicks on the option to show Student list 6) Directing The Employee to The Student list page.
Subsequent terms	Not found
Alternate path	Not found

Table 27. Use Case Specification (Show Student list)

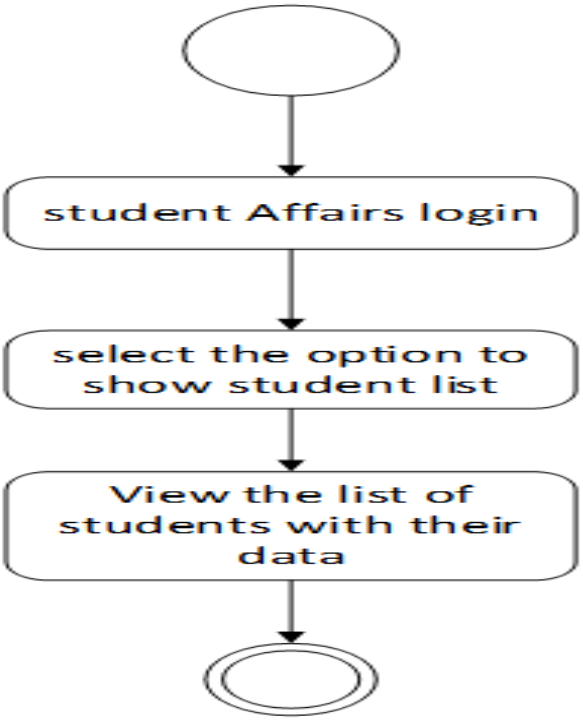


Figure 45. Show Student list Activity diagram

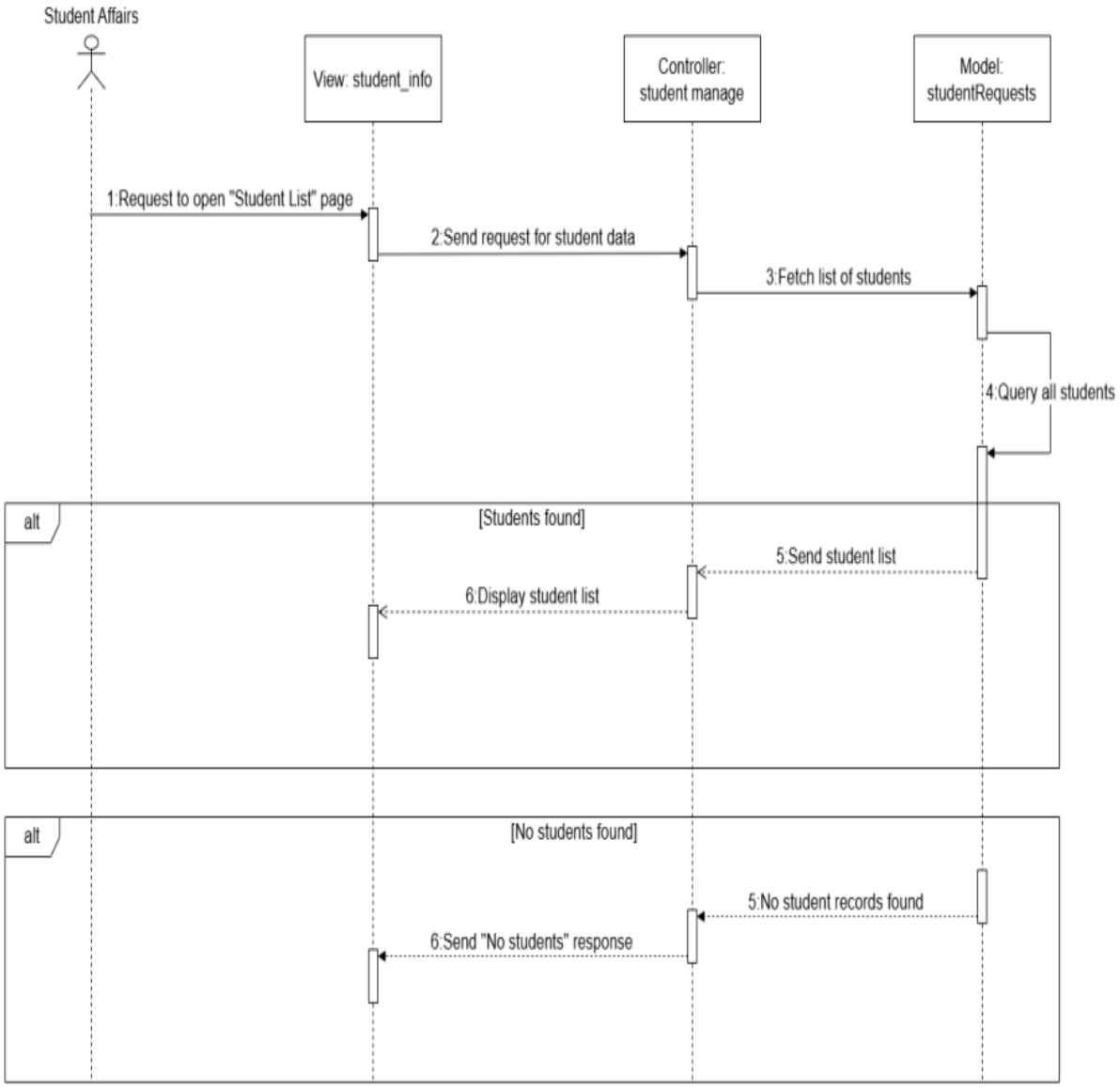


Figure 46. Show Student list Sequences diagram

20.Add student

ID	SCMS-20
Description	Add student
Actors	student Affairs
Preconditions	• Employee must have an account in the system and access to the Add Student functionality
Main path	1. Class employee accesses the function of adding student in the system. 2. The system provides a form for entering Student information. 3. Class employee completes the information form. 4. registration employee clicks the “Save” button to add the student to the system. 5. The system verifies the accuracy of the information entered 6. If the information is correct, the student is added to the system
Subsequent terms	Updating course information throughout the system
Alternate path	If the student information is incorrect, a message appears and the information is re-entered and go to the step"3"

Table 28. Use Case Specification (Add student)

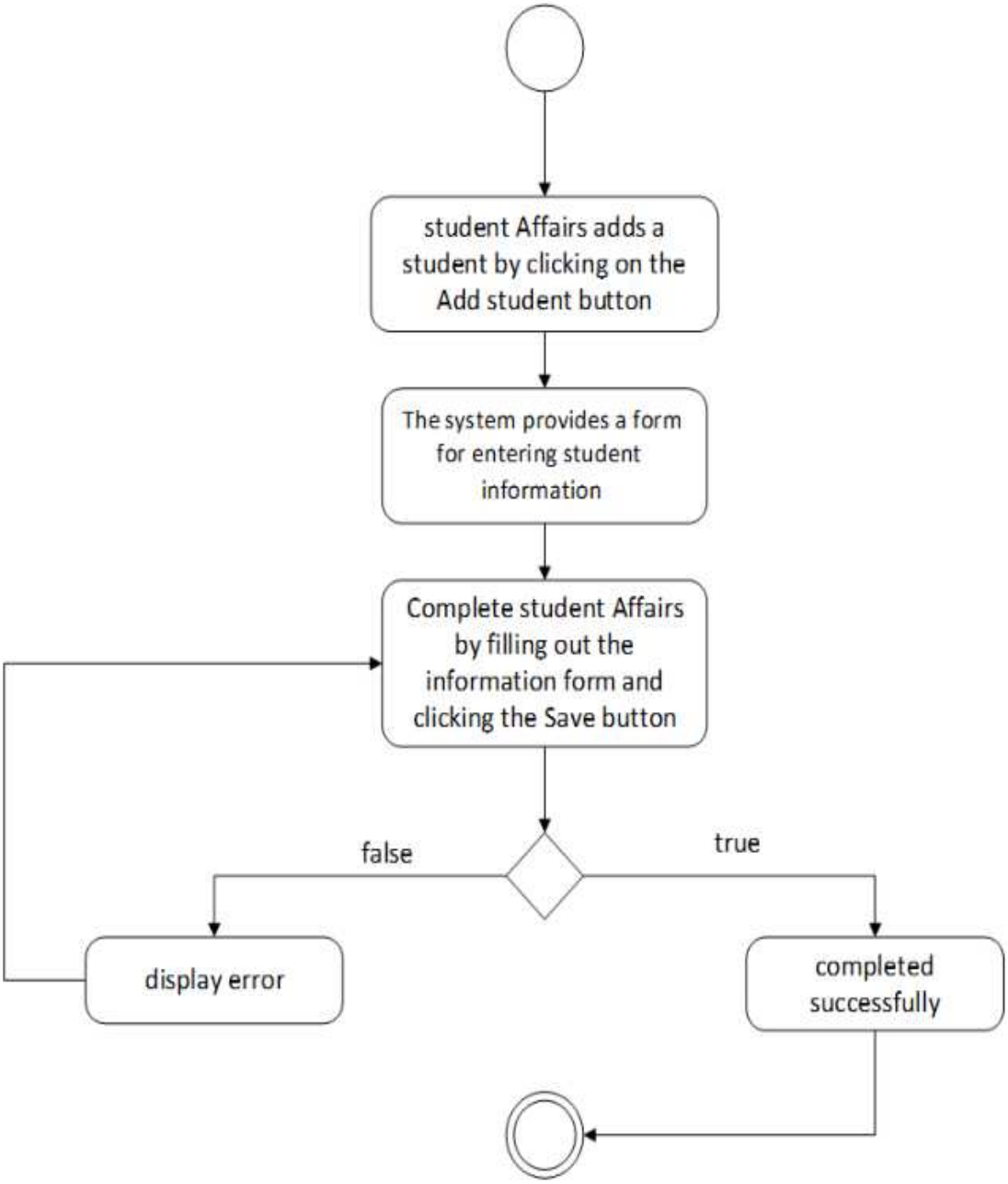


Figure 47. Add student Activity diagram

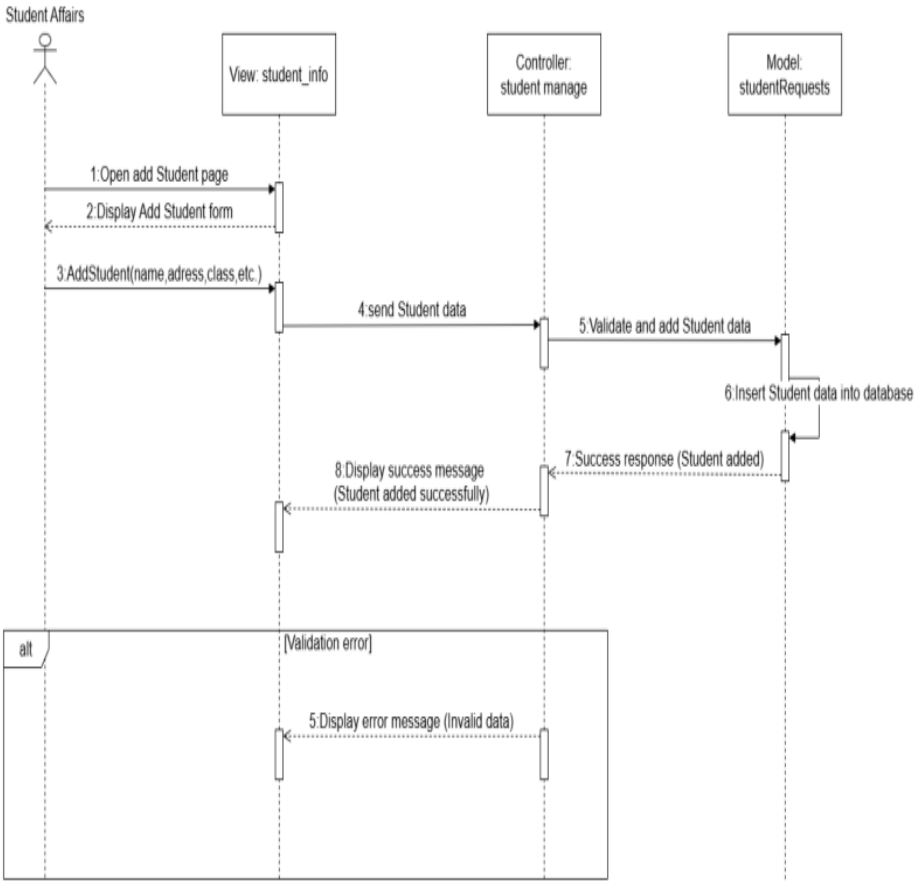


Figure 48. Add student Sequences diagram

21.Edit Information Student

ID	SCMS-
Description	Edit Information Student
Actors	student Affairs
Preconditions	• Employee must have an account in the system • Academic year and grade data must be accurate and up-to-date in the system.
Main path	1. Employee click on Edit bottom in student profile 2. System display Edit form and asks employee to edits data 3. enter a new data 4. System validates a new data and show anew information
Subsequent terms	Updating course information throughout the system
Alternate path	If the Student's information is duplicate, a message appears and the information is re-entered and go to the step"3"

Table 29. Use Case Specification (Edit Information Student)

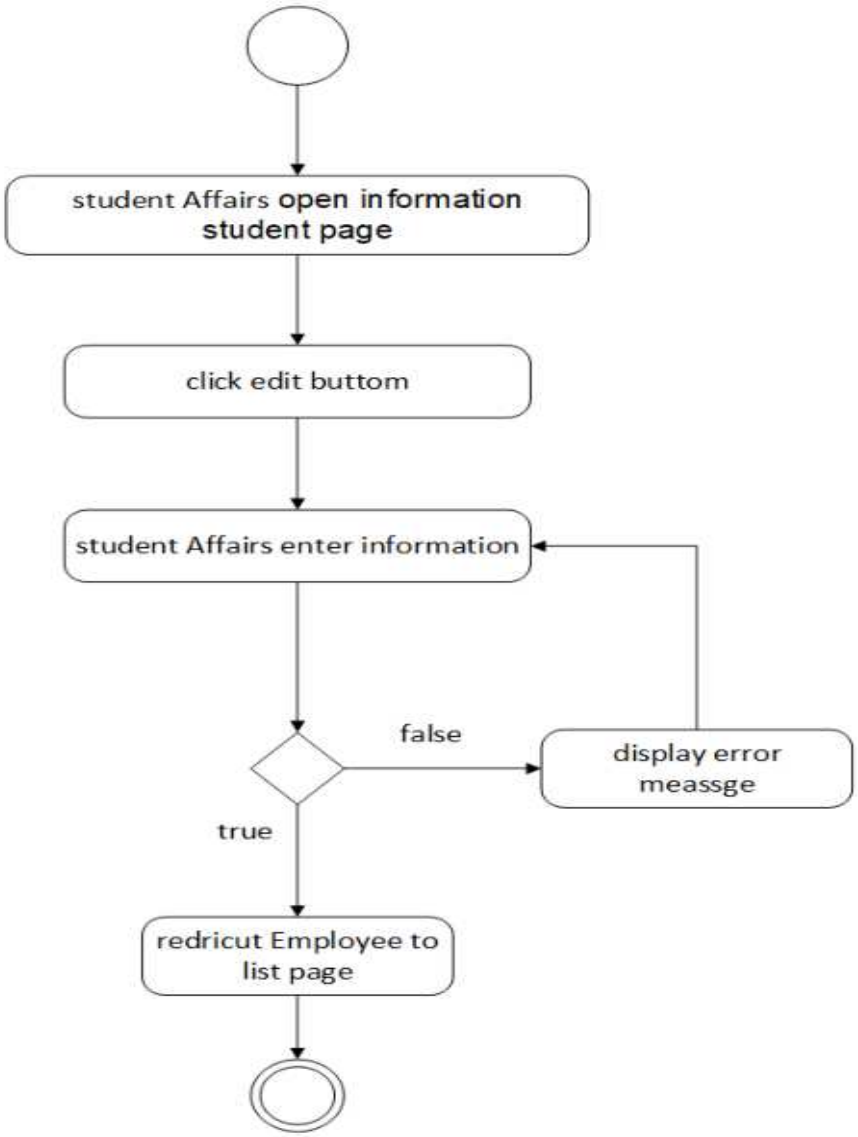


Figure 49. Edit Information Student Activity diagram

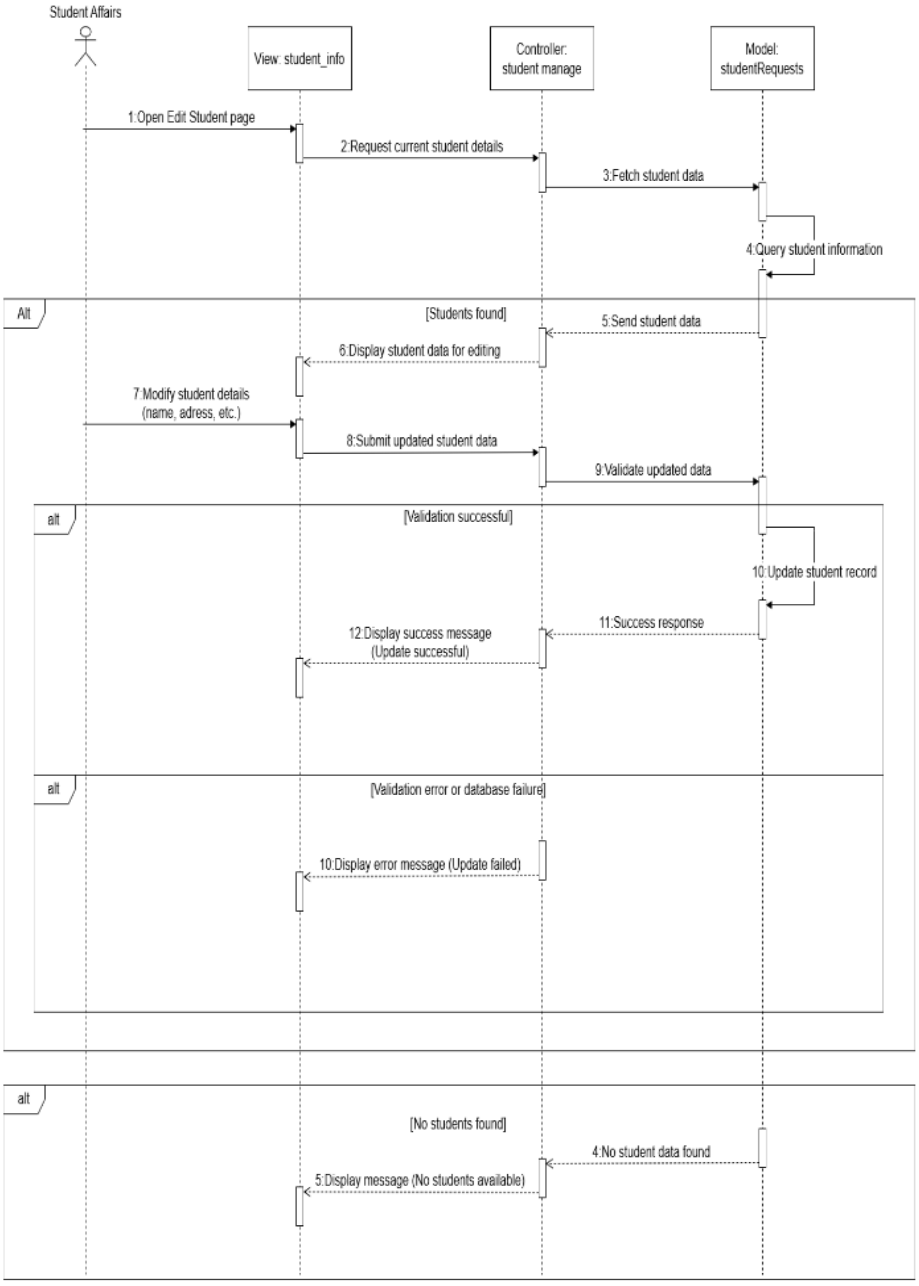


Figure 50. Edit Information Student Sequences diagram

22.Delete Student

ID	SCMS-
Description	Delete Student
Actors	student Affairs
Preconditions	The Employee must have an account to log in to the system
Main path	1. The Employee chooses the option to shoe Student's list. 2. The Employee clicks on the delete button accompanying each Student 3. Deletes the Student and removes him from the student list
Subsequent terms	Directing the employee to the student list page.
Alternate path	Updating student information throughout the system

Table 30. Use Case Specification (Delete Student)

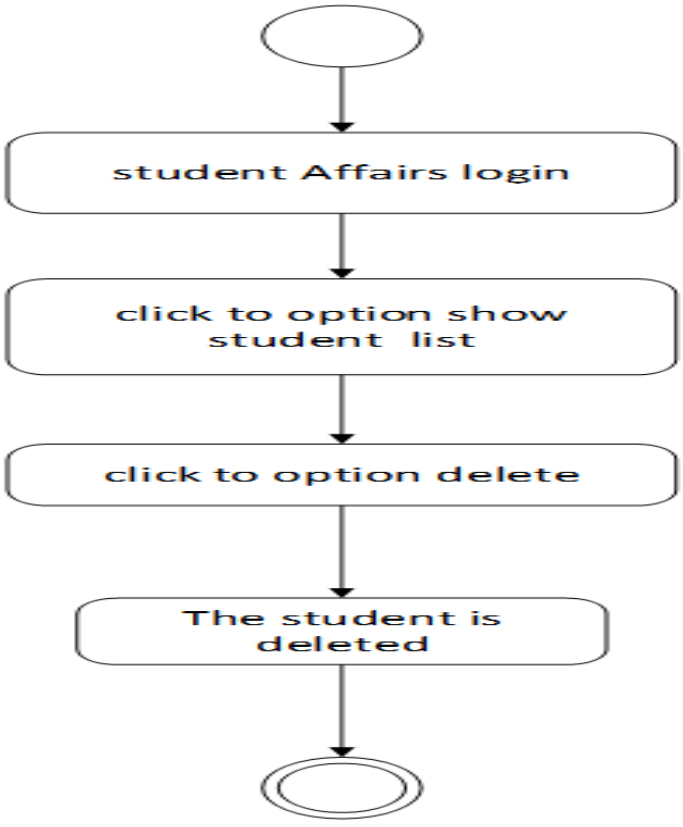


Figure 51. Delete Student Activity diagram

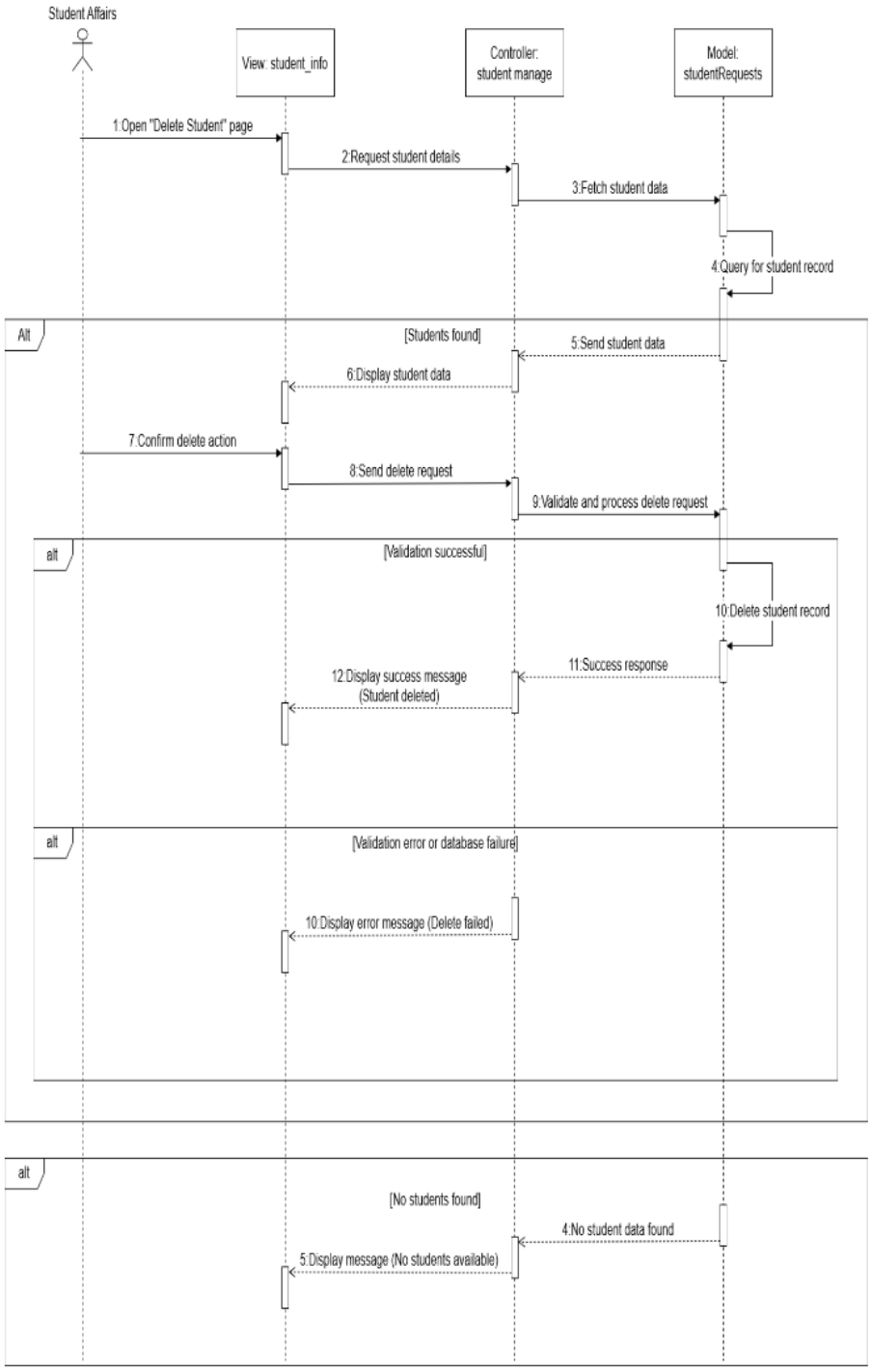


Figure 52. Delete Student Sequences diagram

23.Create Class

ID	SCMS-23
Description	Create Class
Actors	student Affairs
Preconditions	• The Employee must have an account to log in to the system • The system must be available
Main path	1) The Employee clicks on the option to create class 2) The system displays a form to enter the required information 3) Provide the required Information about the class 4) The system verifies the information provide 5) If the information is correct, save the class in the system
Subsequent terms	Not found
Alternate path	If the information is incorrect, a message appears and the information is re-entered and go to the step"3"

Table 31. Use Case Specification (Create Class)

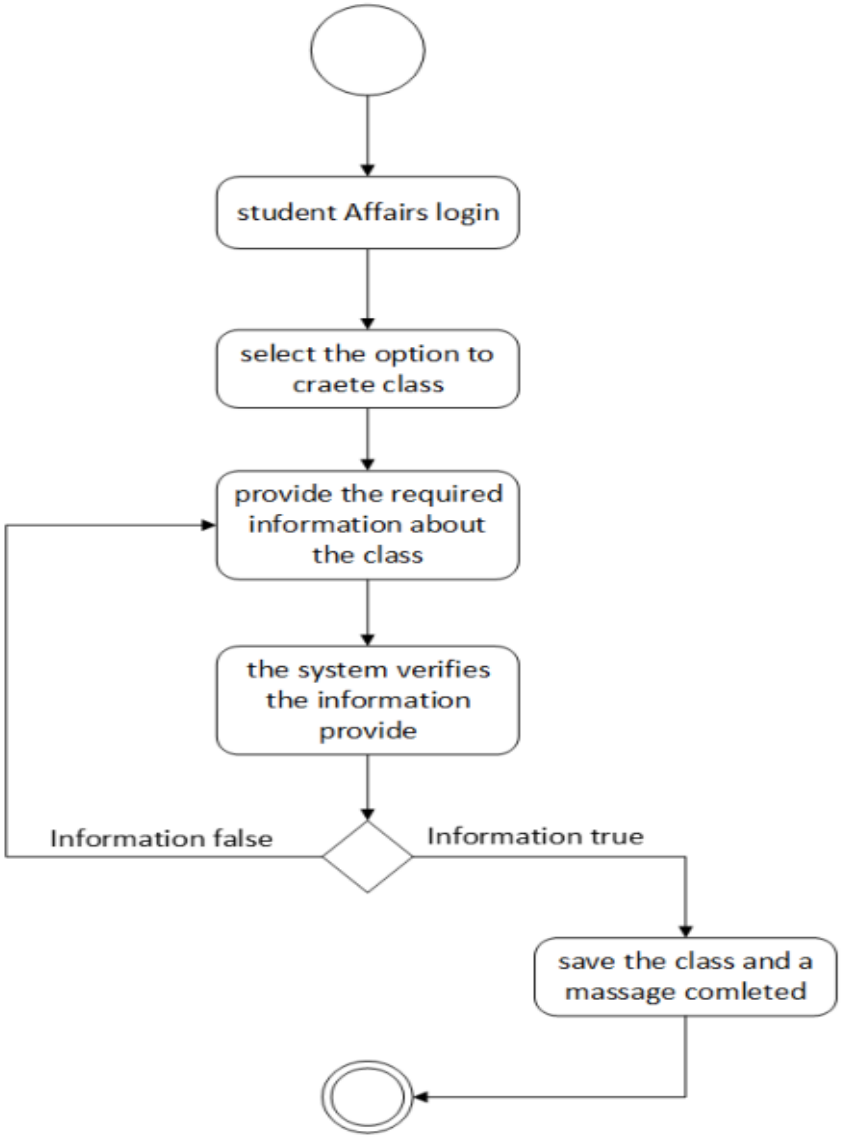


Figure 53 Create Class Activity diagram

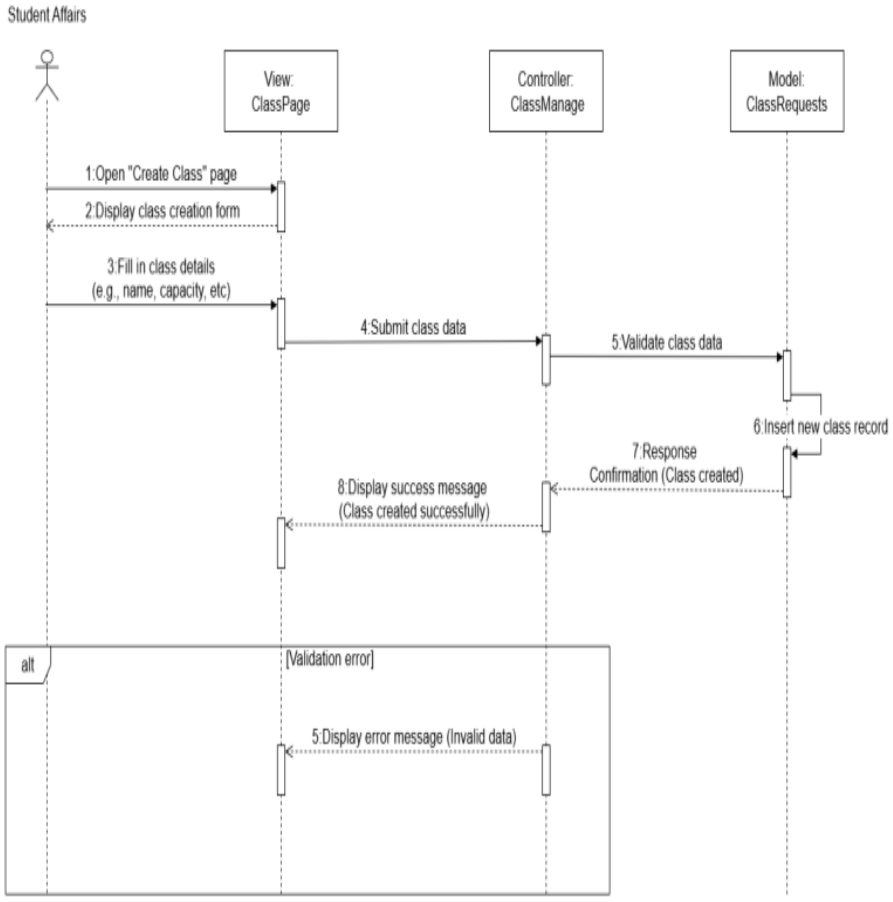


Figure 54. Create Class Sequences diagram

24.Edit Information Class

ID	SCMS-24
Description	Edit Information Class
Actors	student Affairs
Preconditions	• Employee must have an account in the system
Main path	1. Employee login 2.Employee click on the Edit Class option 3. System display Edit form and asks employee to edits data 4. enter a new data 5. System validates a new data and show anew information
Subsequent terms	Updating course information throughout the system
Alternate path	If the information is duplicate, a message appears and the information is re-entered and go to the step"4"

Table 32. Use Case Specification (Edit Information Class)

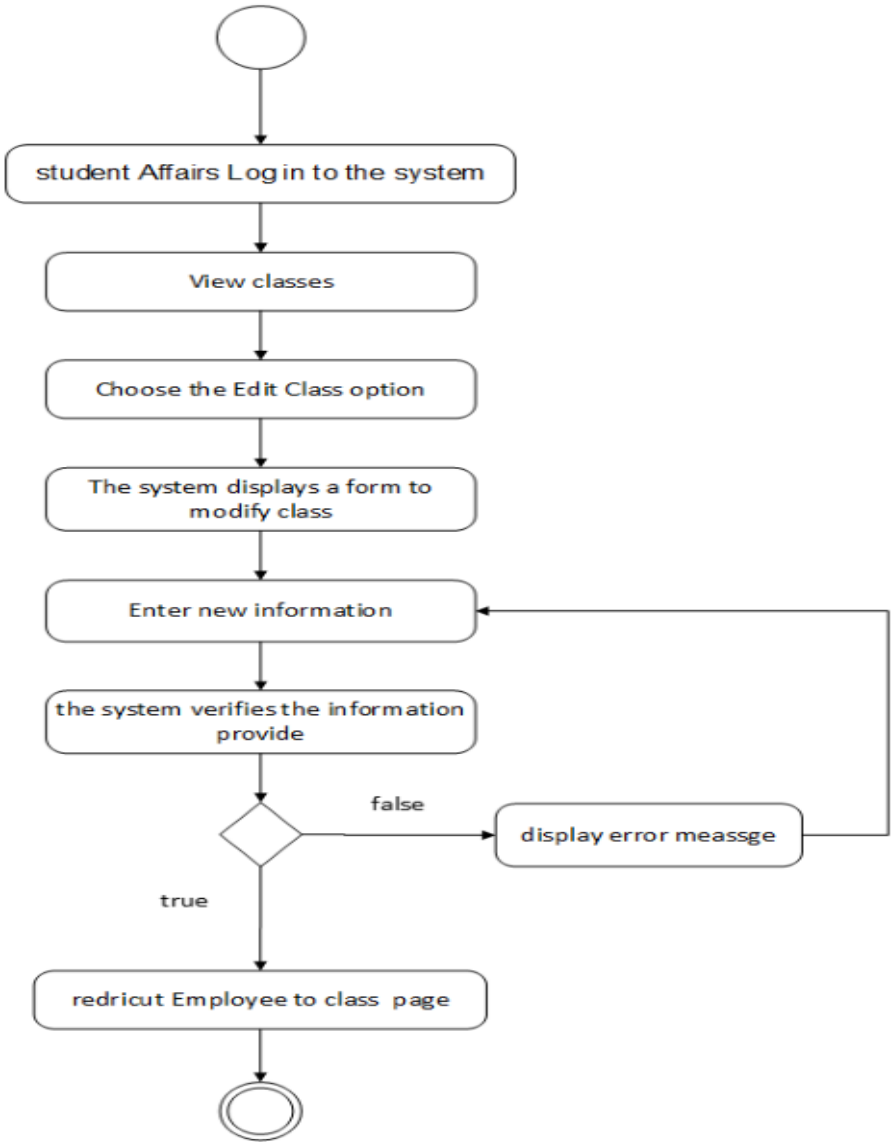


Figure 55. Edit Information Class Activity diagram

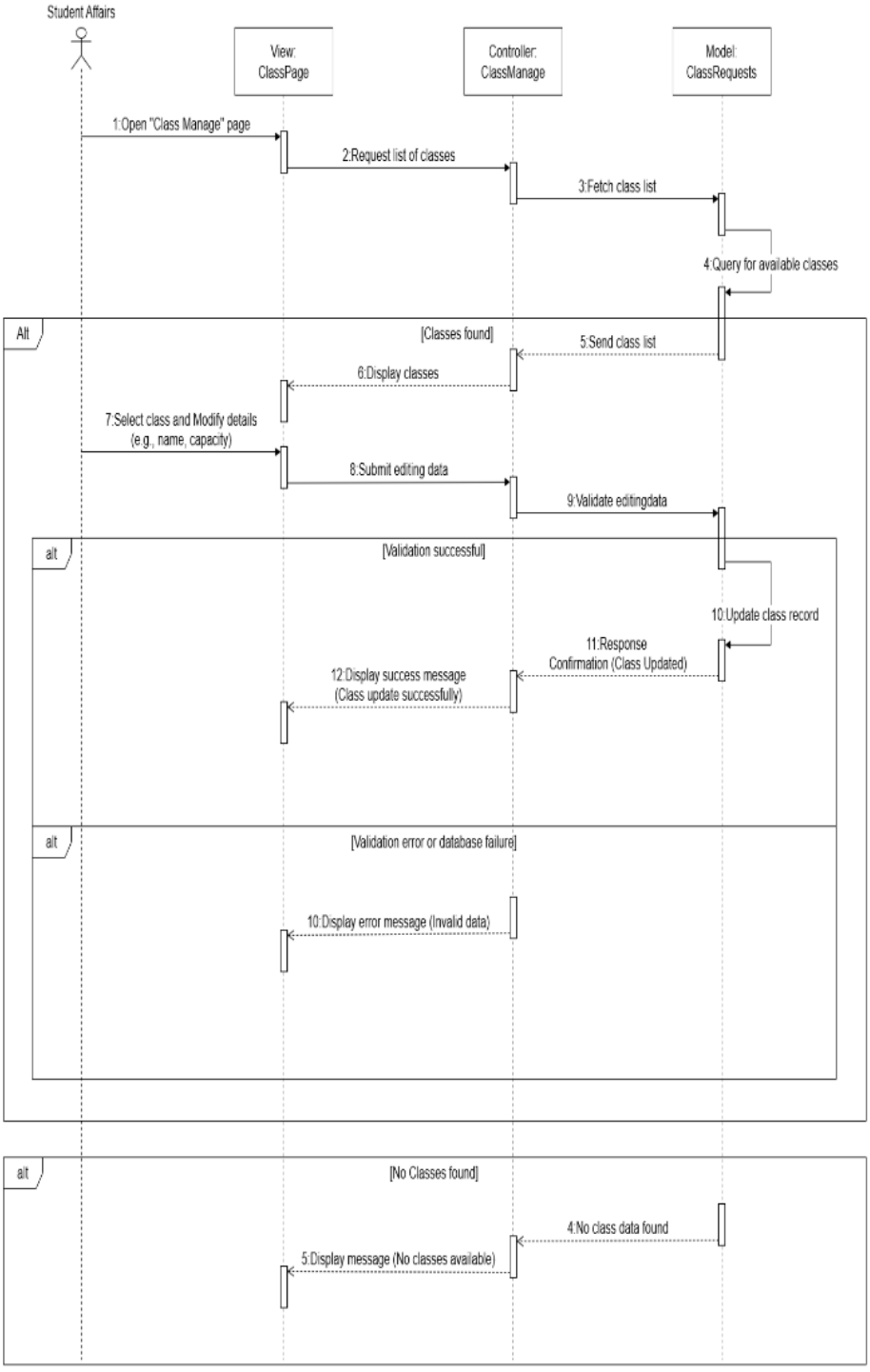


Figure 56. Edit Information Class Sequences diagram

25.Delete Class

ID	SCMS-25
Description	Delete Class
Actors	student Affairs
Preconditions	The Employee must have an account to log in to the system
Main path	1. The Employee chooses the option to show class. 2. The system displays a list of class 3. The Employee clicks on the delete button accompanying each Class 4. The system Deletes the Class and removes him from the Class list
Subsequent terms	There should be no division in the class.
Alternate path	If there is a division in the class that displays a message, it cannot be deleted

Table 33. Use Case Specification (Delete Class)

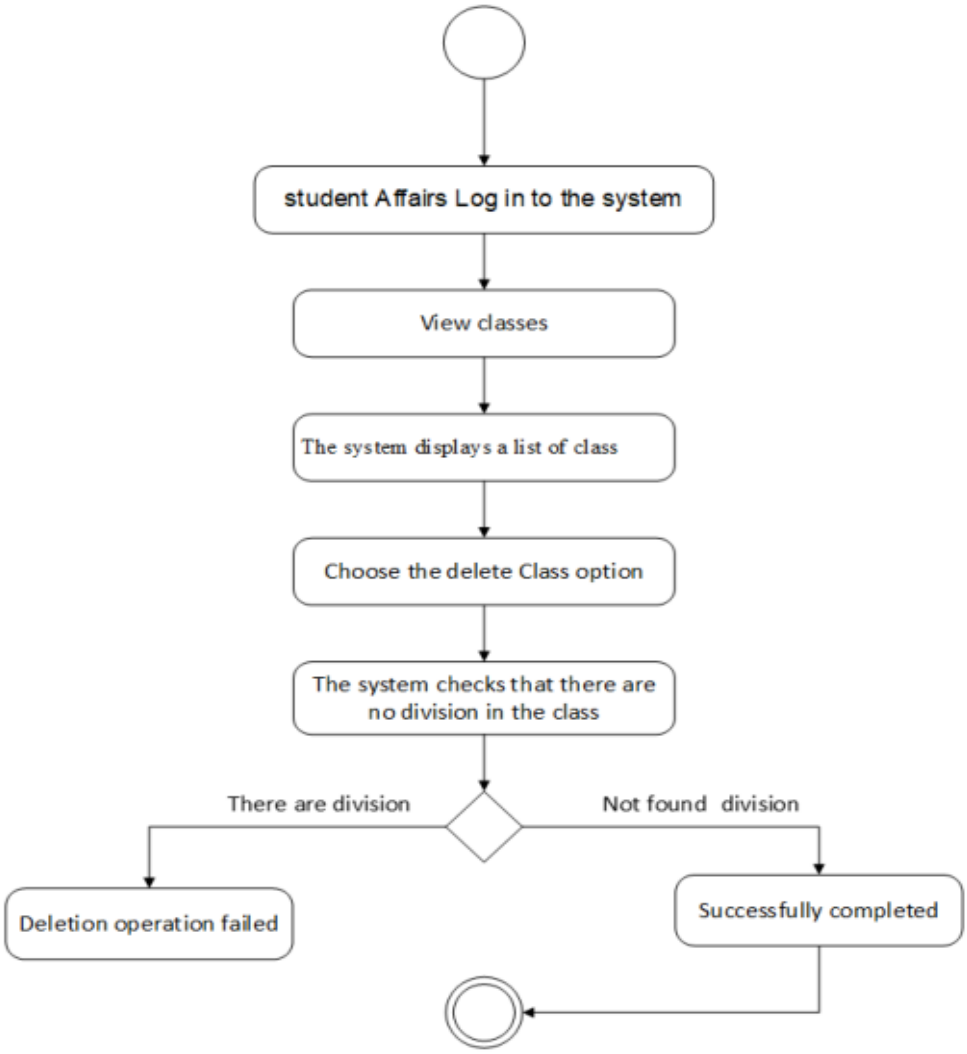


Figure 57. Delete Class Activity diagram

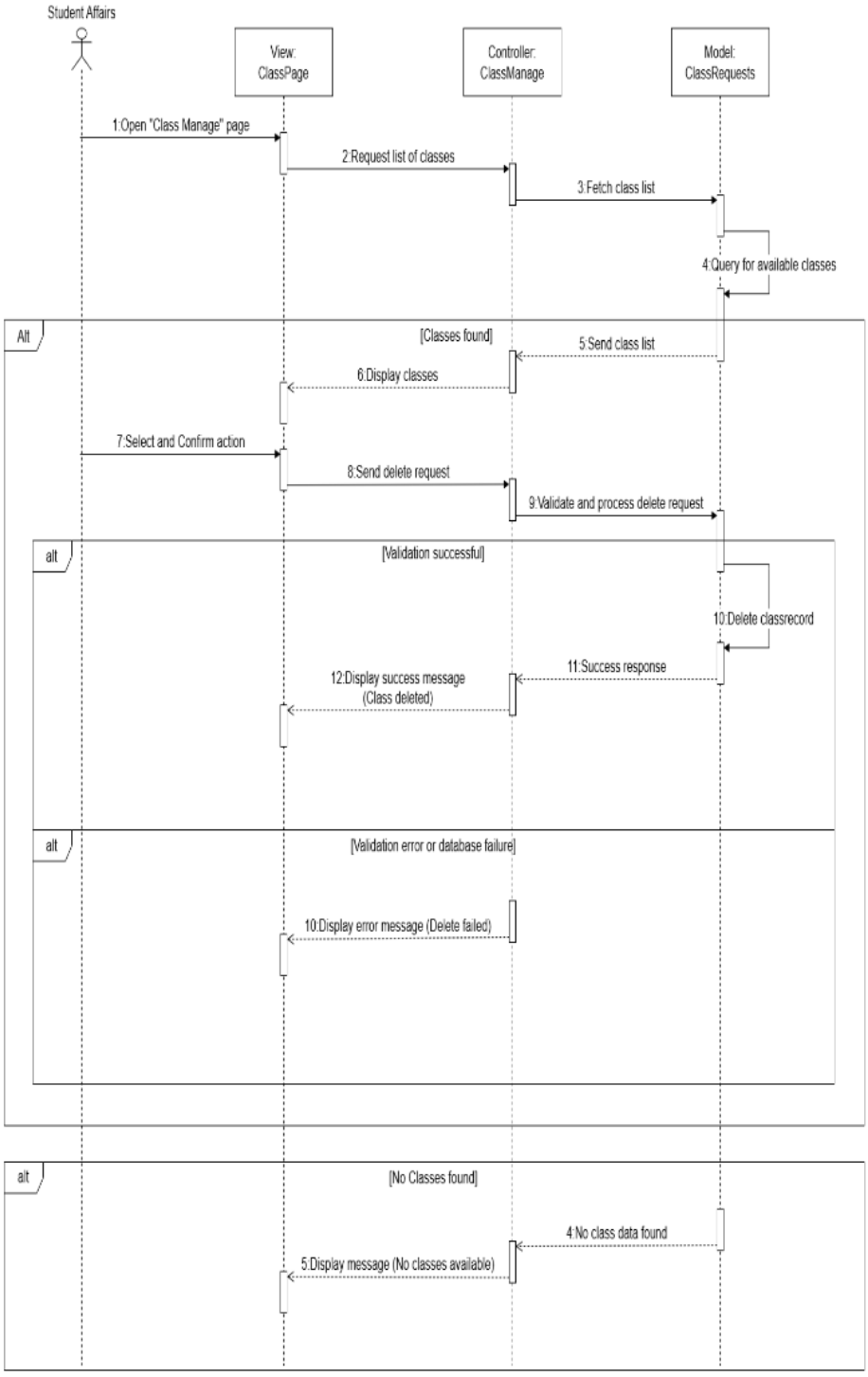


Figure 58. Delete Class Sequences diagram

26.Create division

ID	SCMS-26
Description	Create division
Actors	student Affairs
Preconditions	• The Employee must have an account to log in to the system • The system must be available
Main path	1) The Employee clicks on the option to create division 2) The system displays a form to enter the required information 3) Provide the required Information about the division 4) The system verifies the information provide 5) If the information is correct, save the class in the system
Subsequent terms	Not found
Alternate path	If the information is incorrect, a message appears and the information is re-entered and go to the step"3"

Table 34. Use Case Specification (Create division)

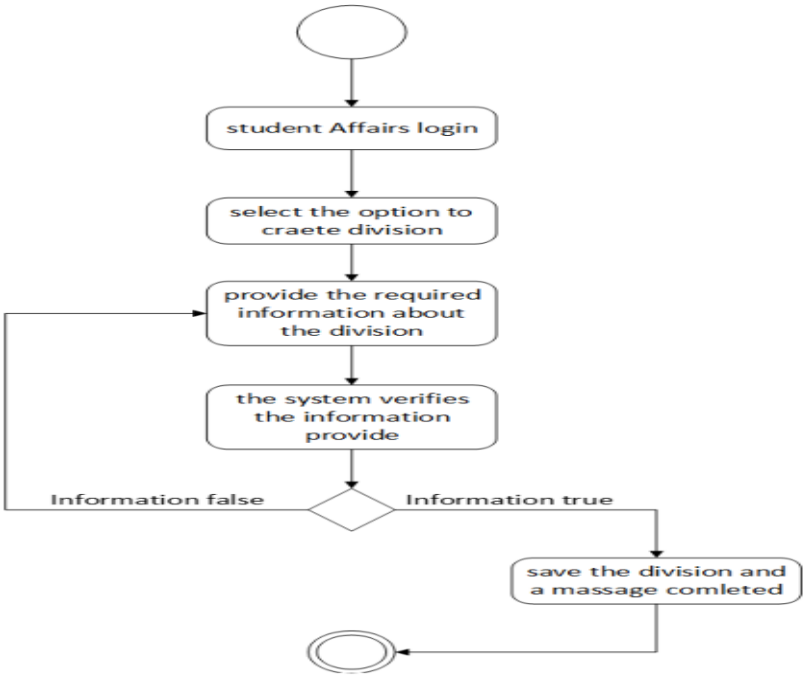


Figure 59. Create division Activity diagram

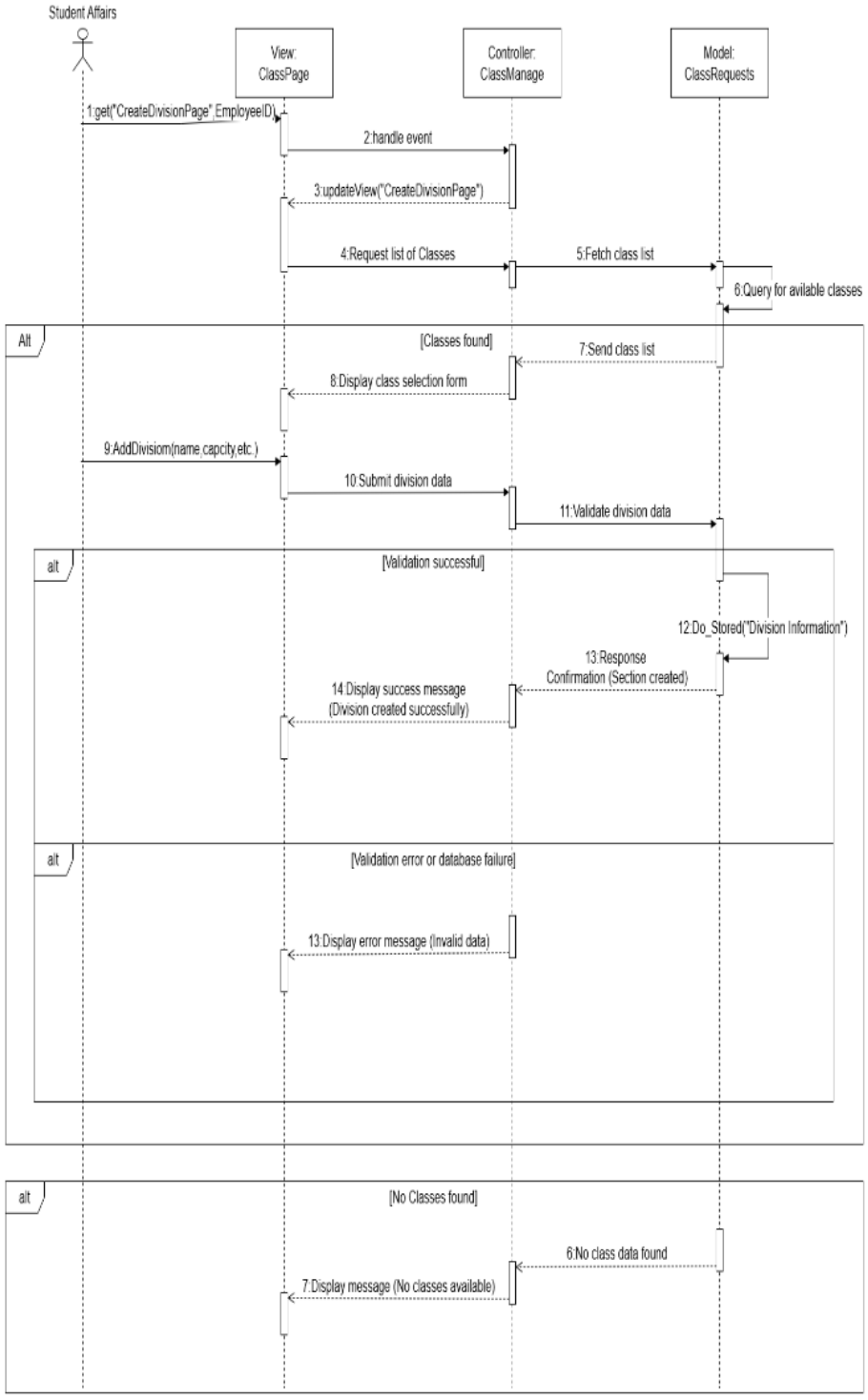


Figure 60. Create division Sequences diagram

27.Edit Information division

ID	SCMS-27
Description	Edit Information division
Actors	student Affairs
Preconditions	• Employee must have an account in the system
Main path	1. Employee login 2. Employee click on the Edit division option 3. System display Edit form and asks employee to edits data 4. enter a new data 5. System validates a new data and show anew information
Subsequent terms	Updating course information throughout the system
Alternate path	If the information is duplicate, a message appears and the information is re-entered and go to the step"4"

Table 35. Use Case Specification (Edit Information division)

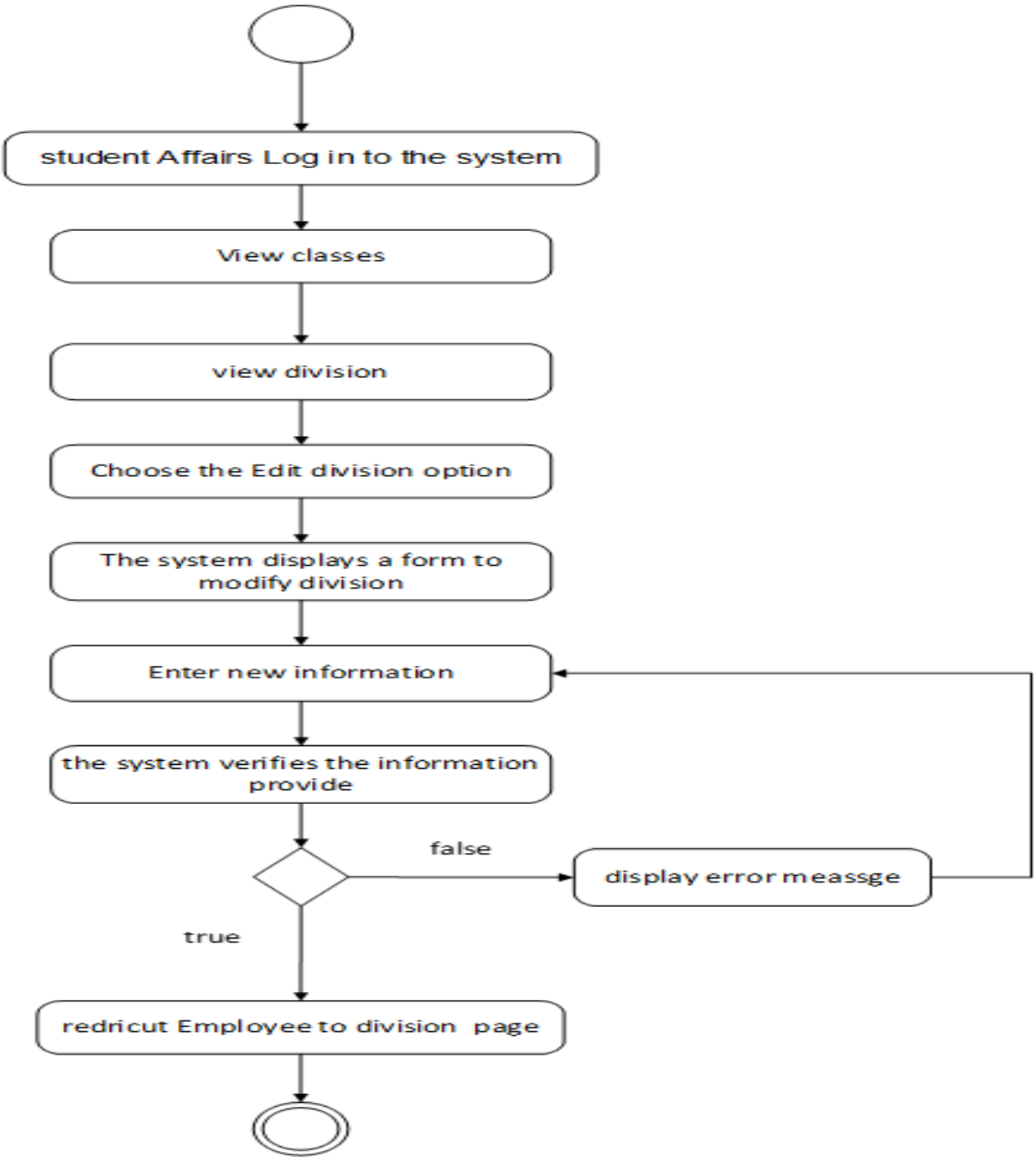


Figure 61. Edit Information division Activity diagram

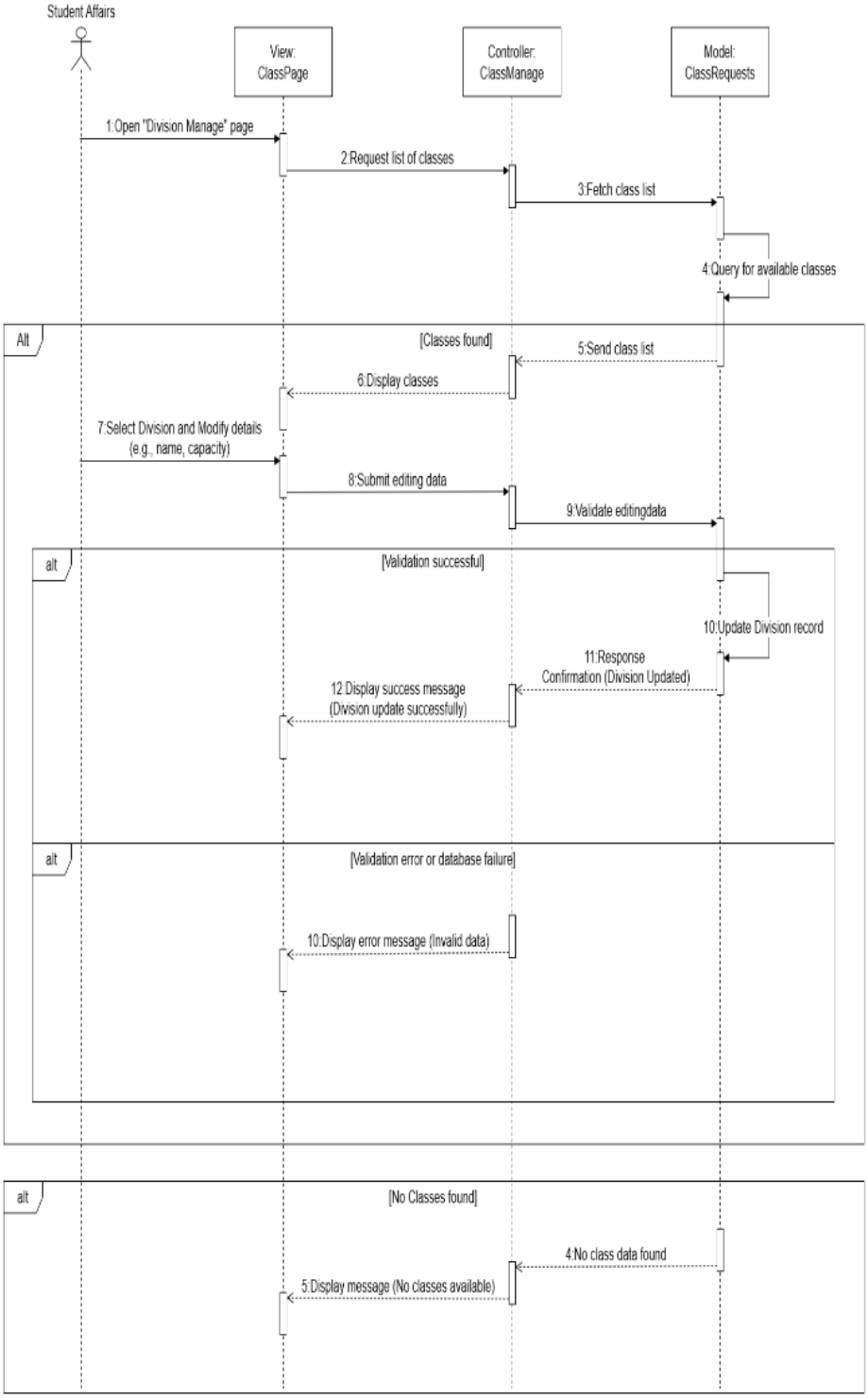


Figure 62. Edit Information division Sequences diagram

28.Delete division

ID	SCMS-28
Description	Delete division
Actors	student Affairs
Preconditions	The Employee must have an account to log in to the system
Main path	1. The Employee chooses the option to show class. 2. The system displays the divisions in the class. 3. The Employee clicks on the delete button accompanying each division. 4. Deletes the Class and removes him from the division list
Subsequent terms	There should be no student in the class.
Alternate path	If there are students in the section, it displays a message that the section cannot be deleted

Table 36. Use Case Specification (Delete division)

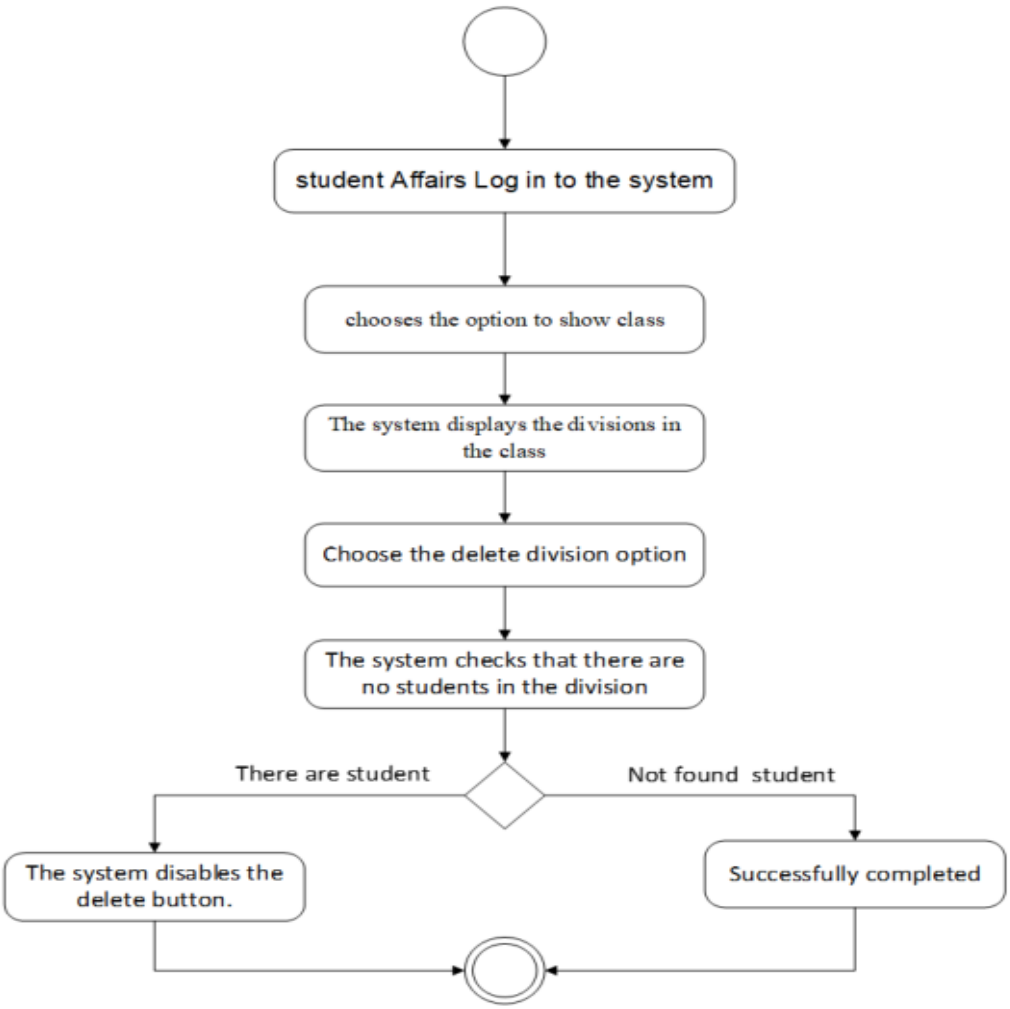


Figure 63. Delete division Activity diagram

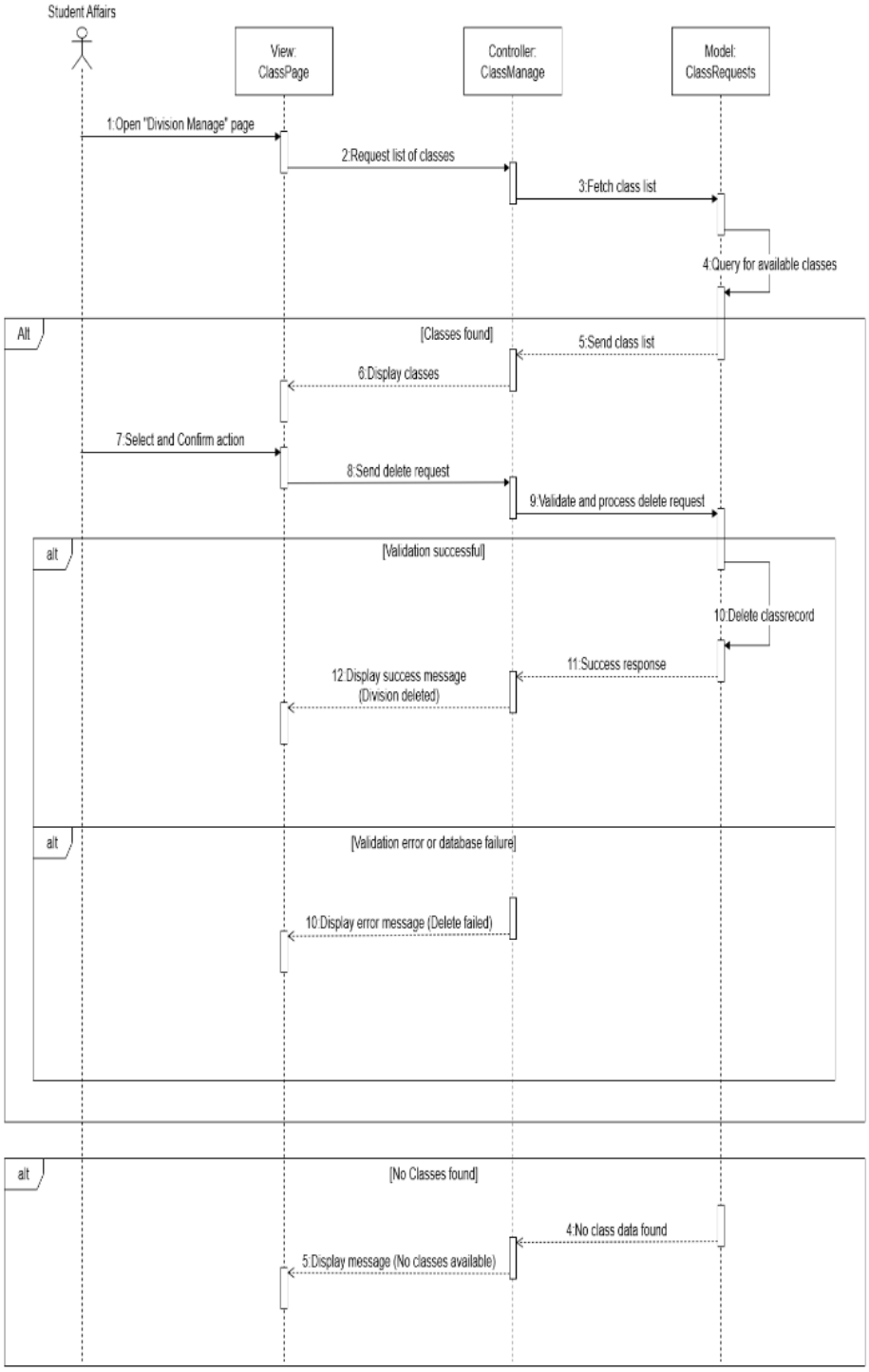


Figure 64. Delete division Sequences diagram

29.Adding students to academic classes

ID	SCMS-29
Description	Adding students to academic classes
Actors	student Affairs
Preconditions	The Employee must have an account to log in to the system
Main path	1. The employee chooses the stages and grades. 2. The system displays the class 3. Select the management division for a specific grade. 4. The system displays the existing divisions 5. The employee chooses to fill out the study section under the section division. 6. The system displays only students who are not in a study group and from the specified grade and add them to the study group.
Subsequent terms	If all students are in a class.
Alternate path	A message is displayed that there are no students to add.

Table 37. Use Case Specification (Adding students to academic classes)

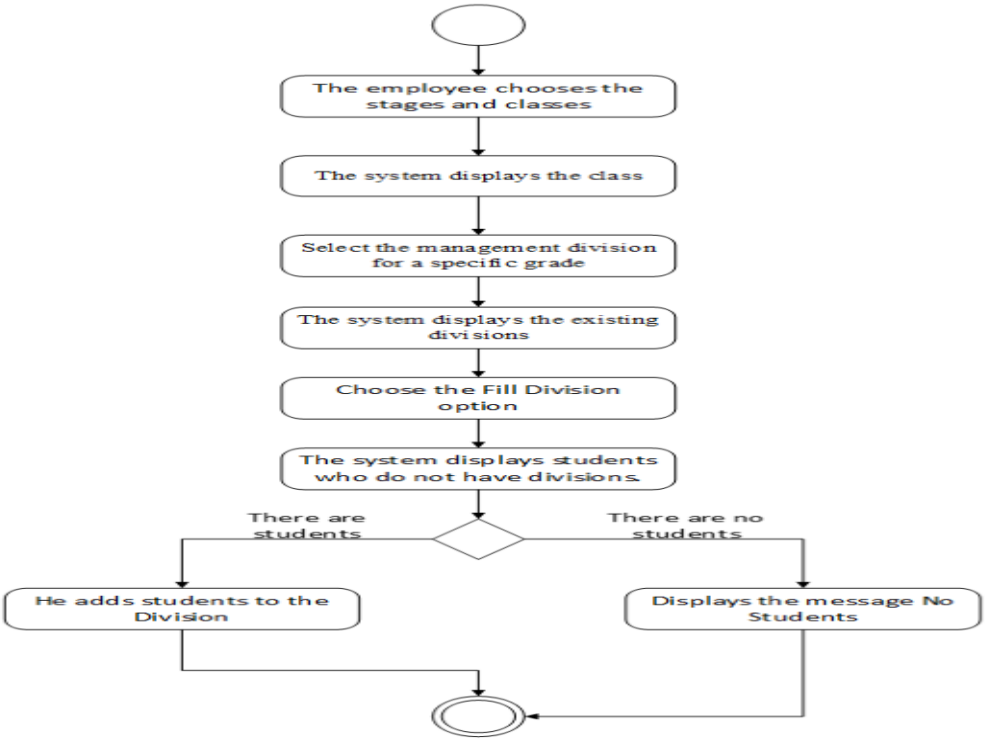


Figure 65. Adding students to academic classes Activity diagram

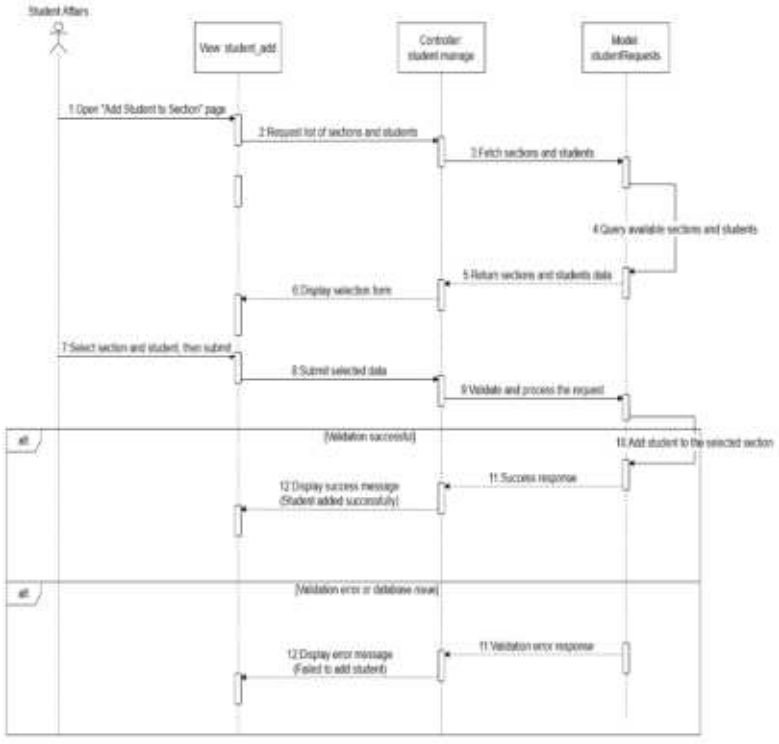


Figure 66. Adding students to academic classes Sequences diagram

30.Transferring a student to another division

ID	SCMS-30
Description	Transferring a student to another division
Actors	student Affairs
Preconditions	The Employee must have an account to log in to the system
Main path	1. The employee chooses the stages and grades. 2. The system displays the class 3. Select the management division for a specific grade. 4. The system displays the existing divisions 5. The employee chooses to display the division below the academic division card. 6. The system displays the students in the division. 7. The employee chooses the option to transfer the student to another division, which is located next to each student in the division. 8. The system displays the available academic departments. 9. The employee selects the available division and completes the process
Subsequent terms	If there is no study section.
Alternate path	A message is displayed that there is no division available.

Table 38. Use Case Specification (Transferring a student to another division)

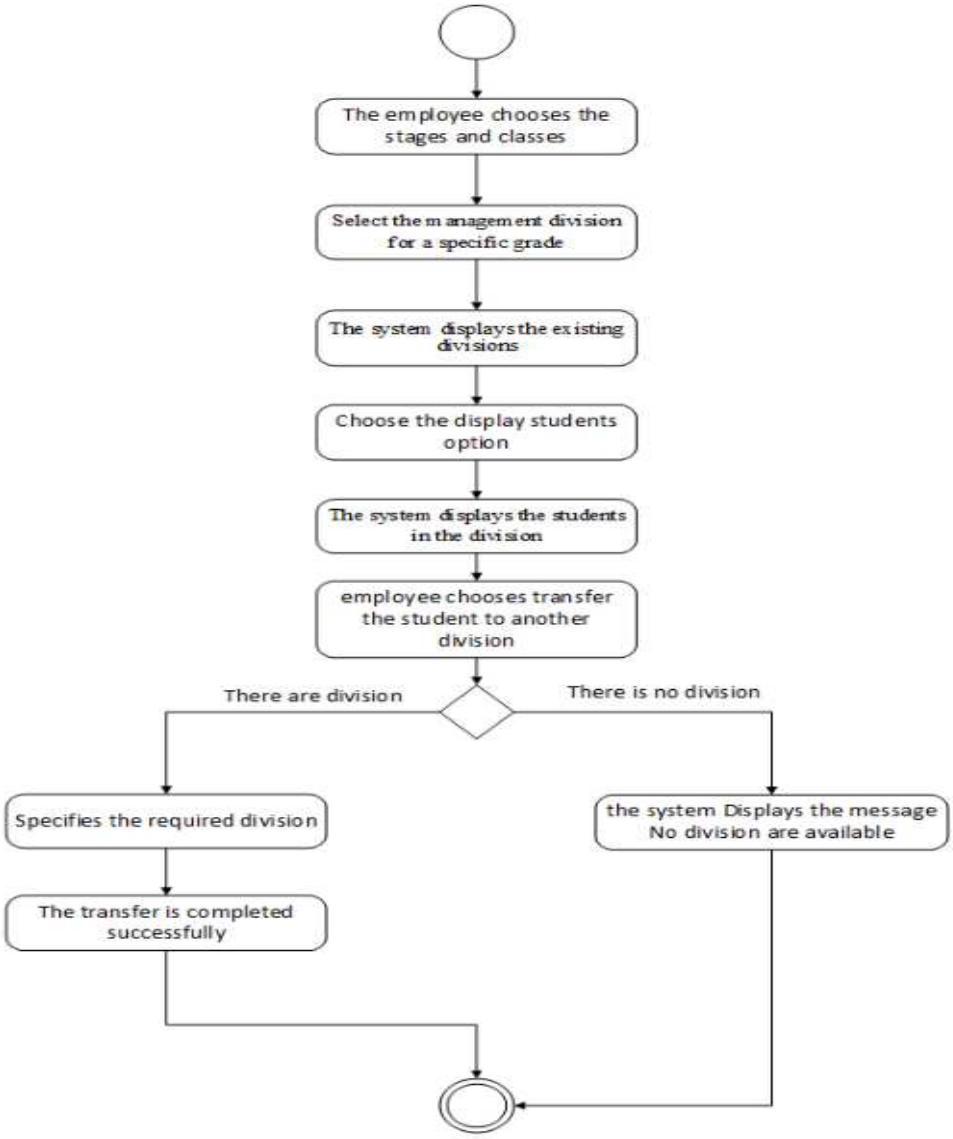


Figure 67. Transferring a student to another division Activity diagram

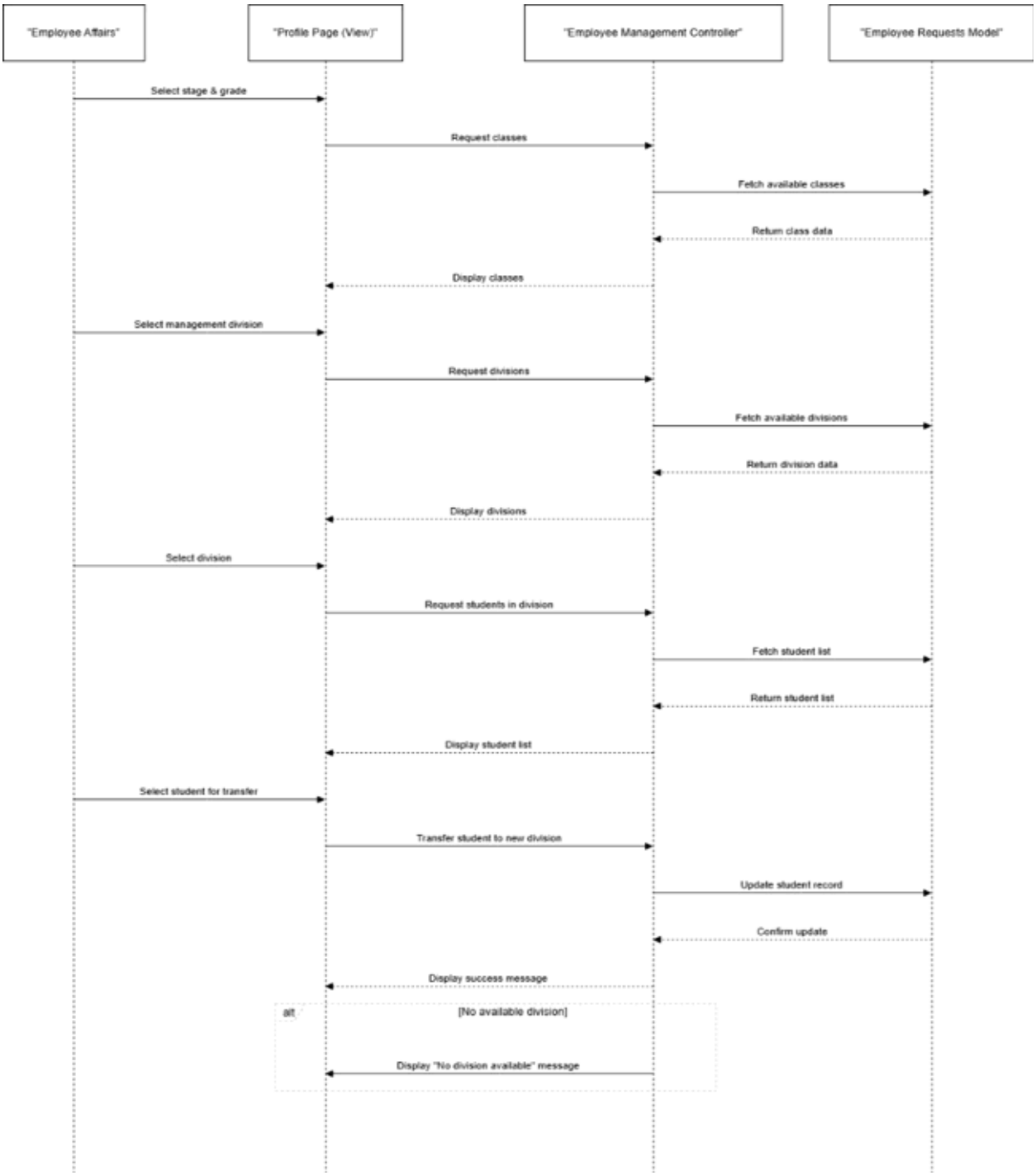


Figure 68. Transferring a student to another division Sequences diagram

31.Create an exam schedule

ID	SCMS-31
Description	Create an exam schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Create an exam schedule functionality
Main path	1. manager accesses the function of Create an exam schedule in the system. 2. The system displays the existing classes. 3. The employee chooses the option to create a table below the class. 4. The system displays a form for you to specify the date, time and materials. 5. The employee enters the necessary information and clicks the Create button. 6. If the information is correct, the table will be created successfully.
Subsequent terms	The system displays the exam schedule after creation.
Alternate path	If the date information is wrong (Friday, Saturday), an error message will be displayed. is re-entered and go to the step"5"

Table 39. Use Case Specification (Create an exam schedule)

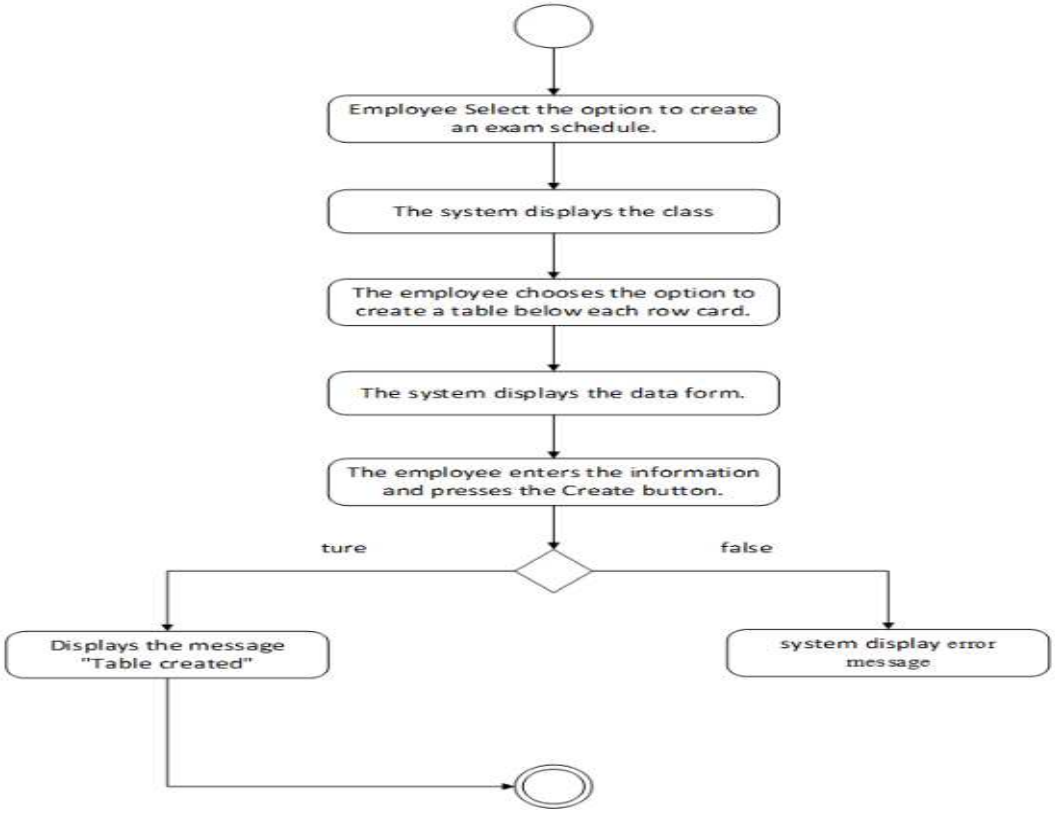


Figure 69. Create an exam schedule Activity diagram

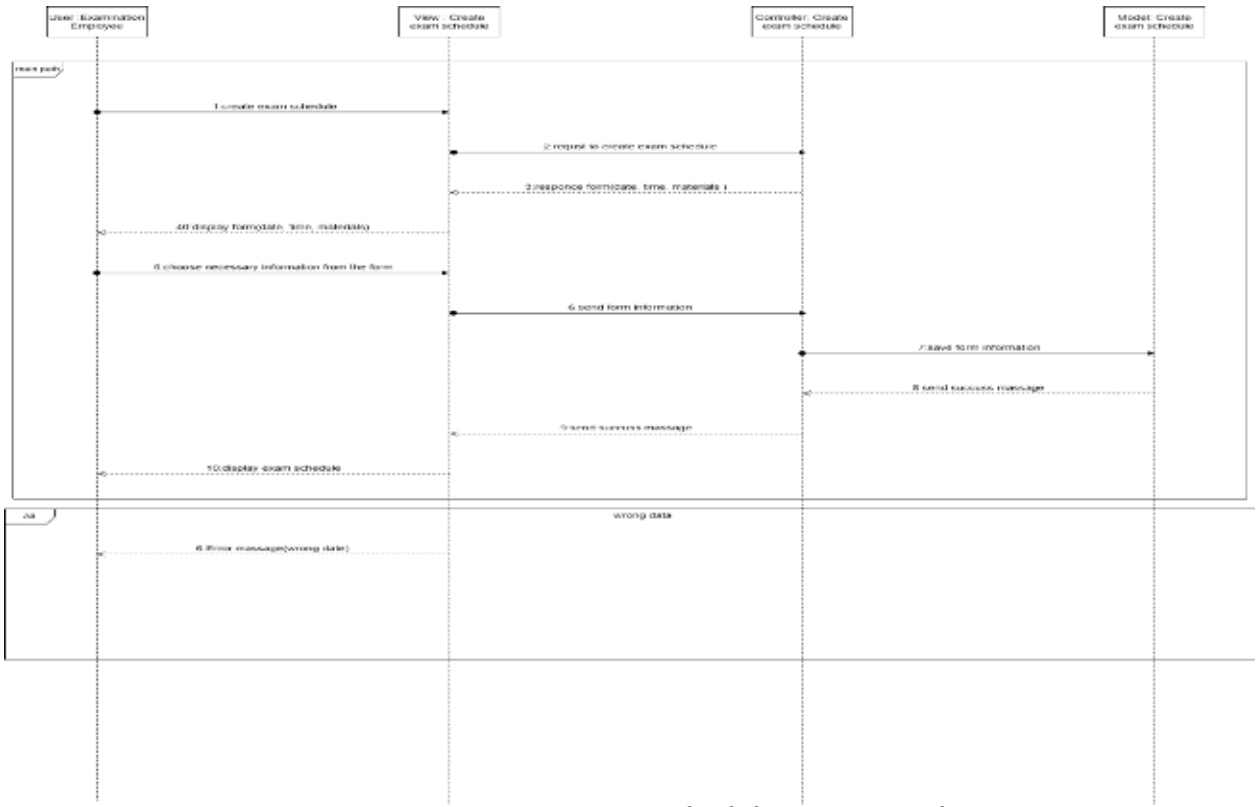


Figure 70. Create an exam schedule Sequences diagram

32.View exam schedule

ID	SCMS-32
Description	View exam schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the View exam schedule functionality
Main path	2. The employee selects the exam schedule option in his/her Navbar. 1. The system displays the existing classes. 2. The employee chooses the option to view a table below the class. 3. The system displays the exam schedule for the required class.
Subsequent terms	The class should have an exam schedule.
Alternate path	If the required class does not have an exam schedule, the option to create an exam schedule and a message to that effect will be displayed.

Table 40. Use Case Specification (View exam schedule)

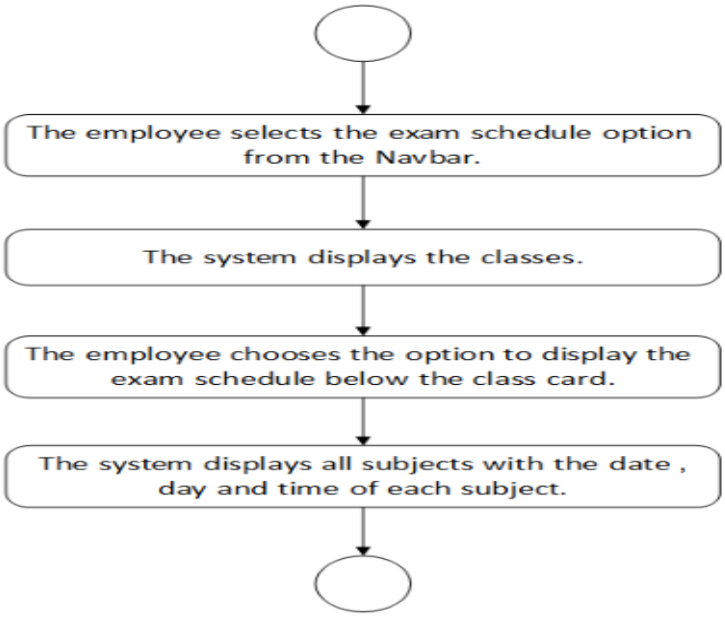


Figure 71. View exam schedule Activity diagram

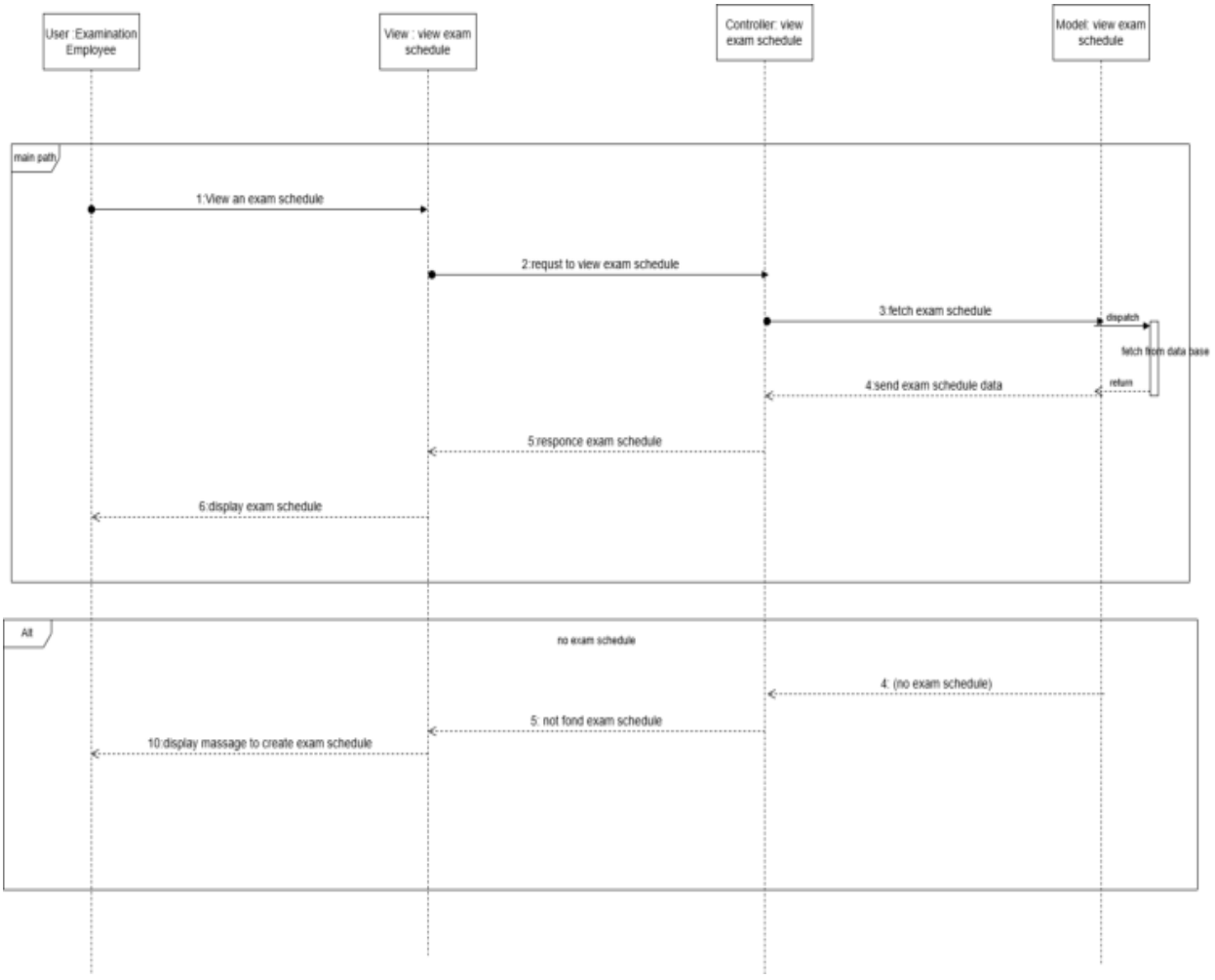


Figure 72. View exam schedule Sequences diagram

33.Edit exam schedule

ID	SCMS-33
Description	Edit exam schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to Edit exam schedule functionality
Main path	1. The employee selects the exam schedule option in his/her Navbar. 2. The system displays the existing classes. 3. The employee chooses the option to Edit a table below the class. 4. The system displays the schedule in the class with an option next to each subject to change the date and time. 5. The employee makes the necessary changes and clicks Save.
Subsequent terms	The class should have an exam schedule.
Alternate path	If the required class does not have an exam schedule, the option to create an exam schedule and a message to that effect will be displayed.

Table 41. Use Case Specification (Edit exam schedule)

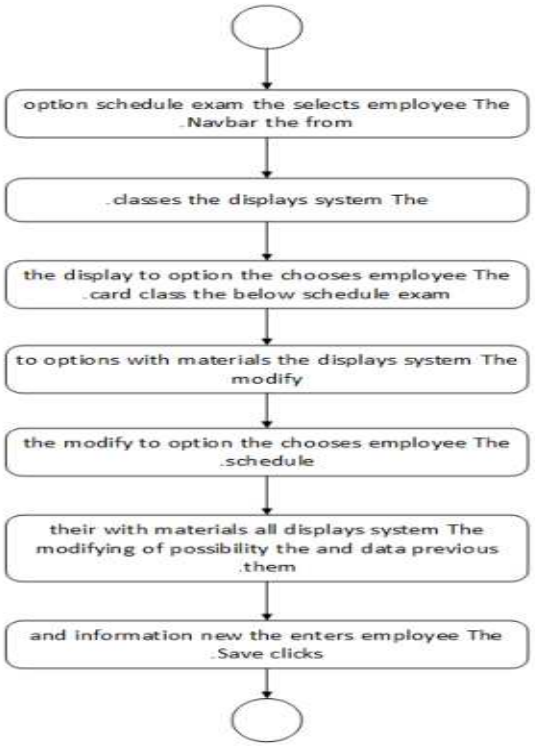


Figure 73. Edit exam schedule Activity diagram

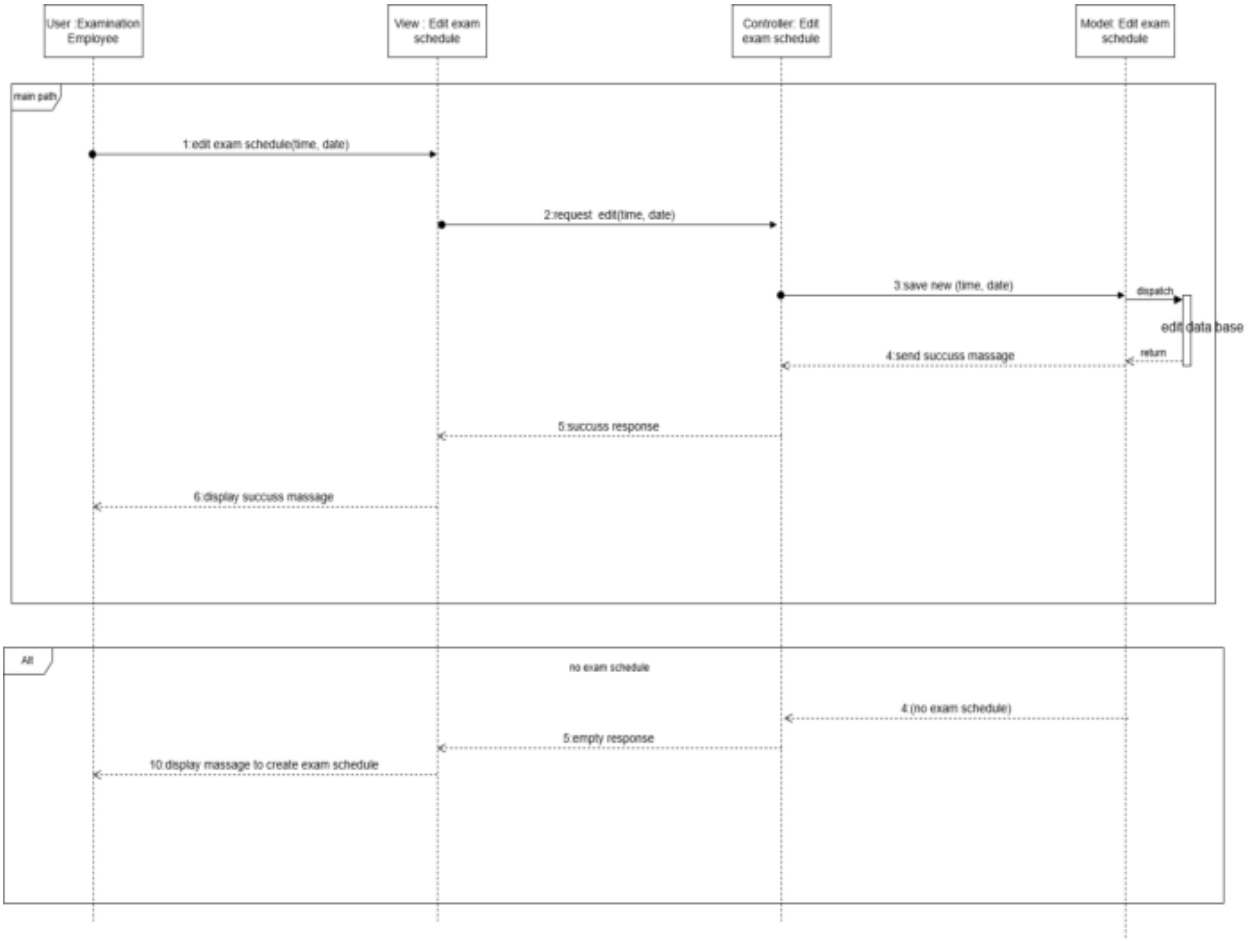


Figure 74. Edit exam schedule Sequences diagram

34.Delete exam schedule

ID	SCMS-34
Description	Delete exam schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Delete exam schedule functionality
Main path	1. The employee selects the exam schedule option in his/her Navbar. 2. The system displays the existing classes. 3. 2. If the class has an exam schedule, the employee chooses the option to delete the schedule at the bottom of the class.
Subsequent terms	The class should have an exam schedule.
Alternate path	If the required class does not have an exam schedule, the option to create an exam schedule and a message to that effect will be displayed.

Table 42. Use Case Specification (Delete exam schedule)

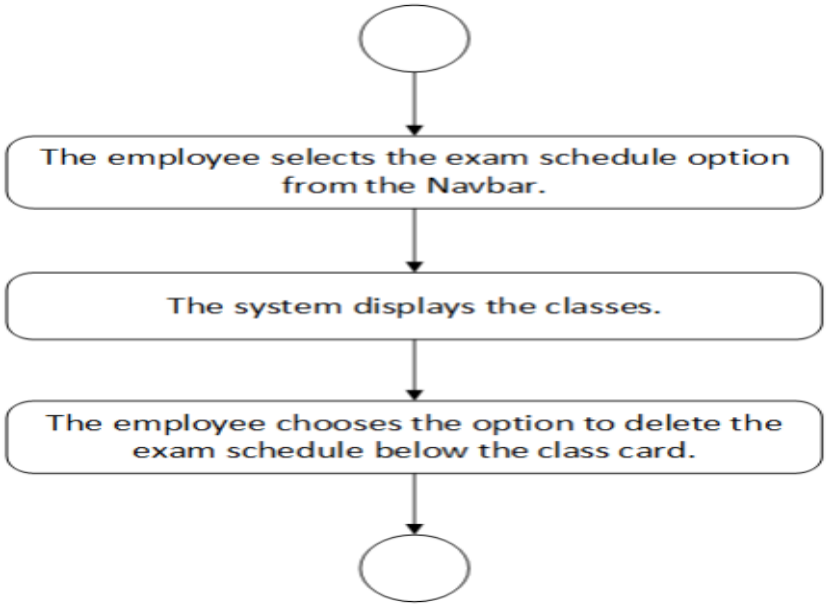


Figure 75 Delete exam schedule Activity diagram

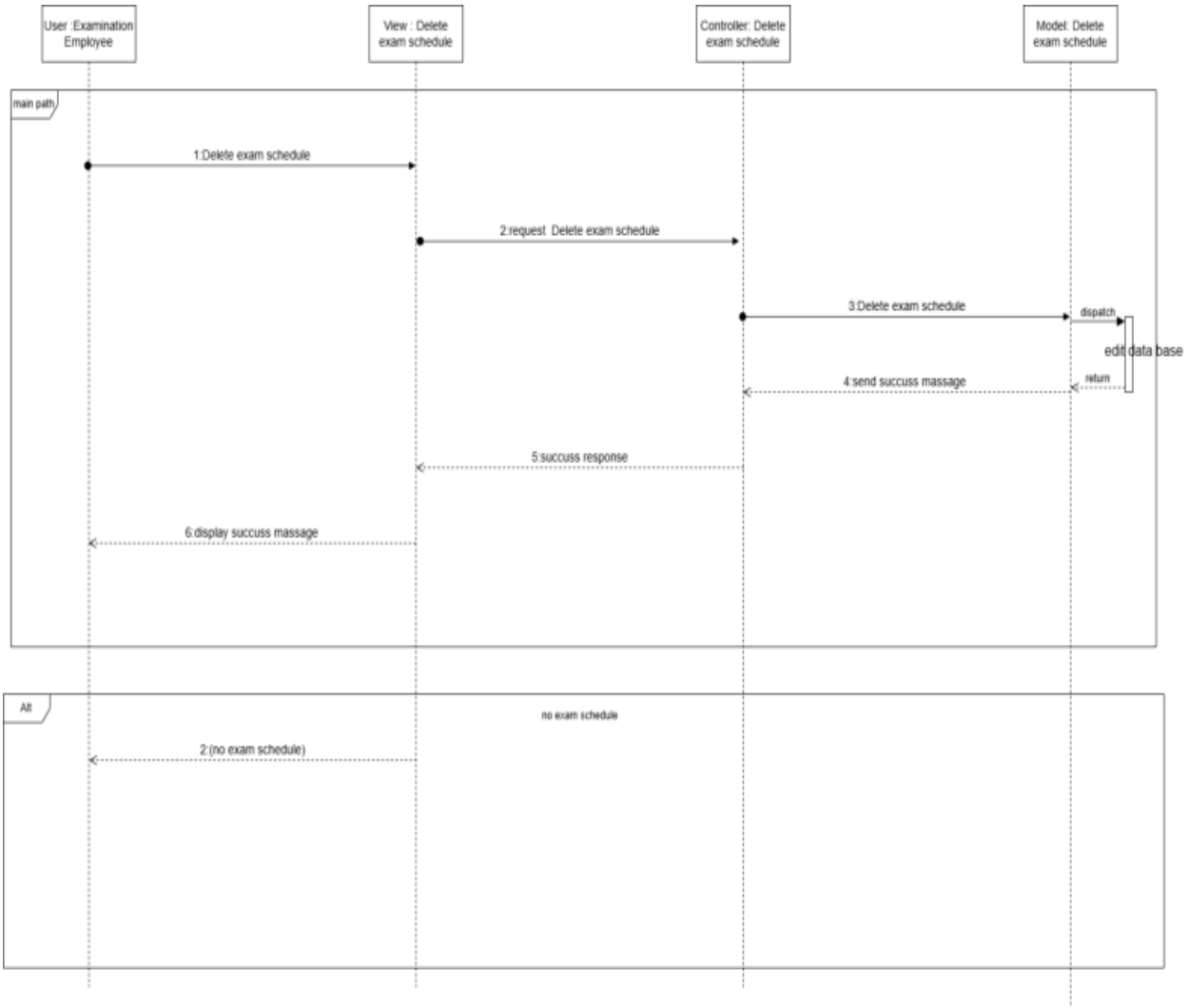


Figure 76 Delete exam schedule Sequences diagram

35.Add grades

ID	SCMS-35
Description	Add grades
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Add grades functionality
Main path	1. The employee selects the add grades option in his/her Navbar. 2. The system displays the existing classes. 3. The employee chooses the option to add grades below the selected class. 4. The system displays all the students in the class with the option to choose the subject and date. 5. The employee enters the mark (quiz, final) for the existing students according to the selected subject and then chooses to add
Subsequent terms	Not found
Alternate path	Not found

Table 43. Use Case Specification (Add grades)

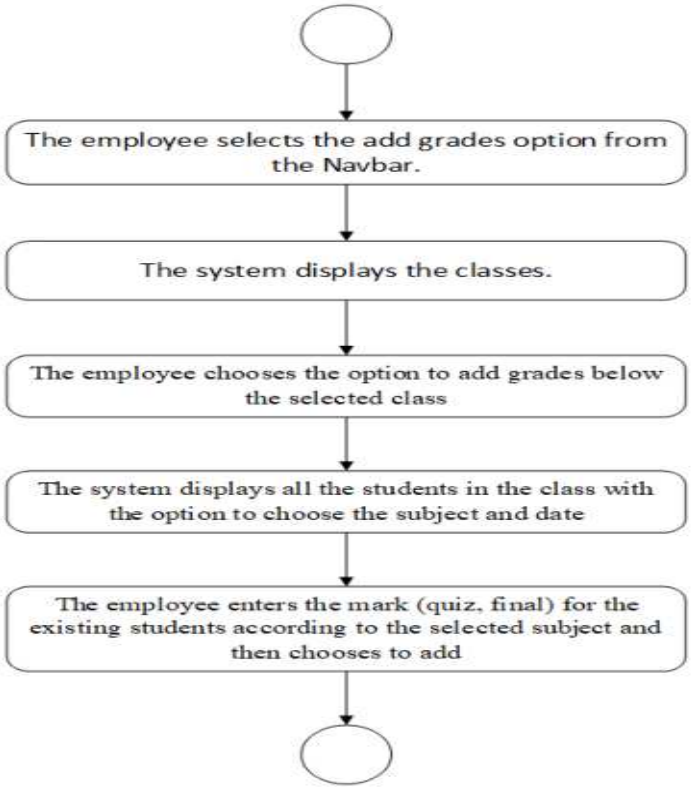


Figure 77. Add grades Activity diagram

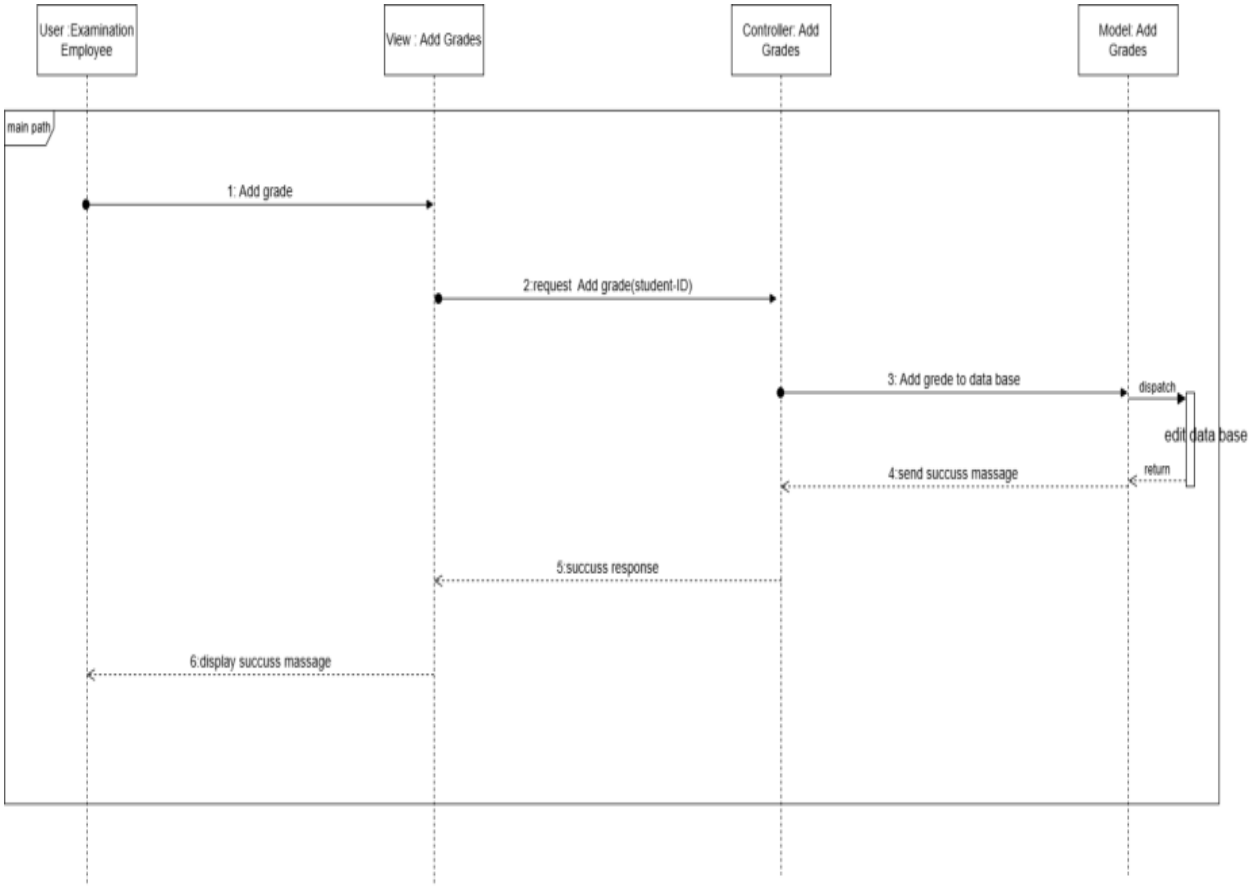


Figure 78. Add grades Sequences diagram

36.View grades

ID	SCMS-36
Description	View grades
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the View grades functionality
Main path	1. The employee selects the grades student option in his/her Navbar. 2. The system displays the existing classes. 3. The employee chooses the option to view grades below the selected class. 4. The system displays all students in the class with their grades in all subjects.
Subsequent terms	The student must have marks in at least one subject.
Alternate path	Not found

Table 44. Use Case Specification (View grades)

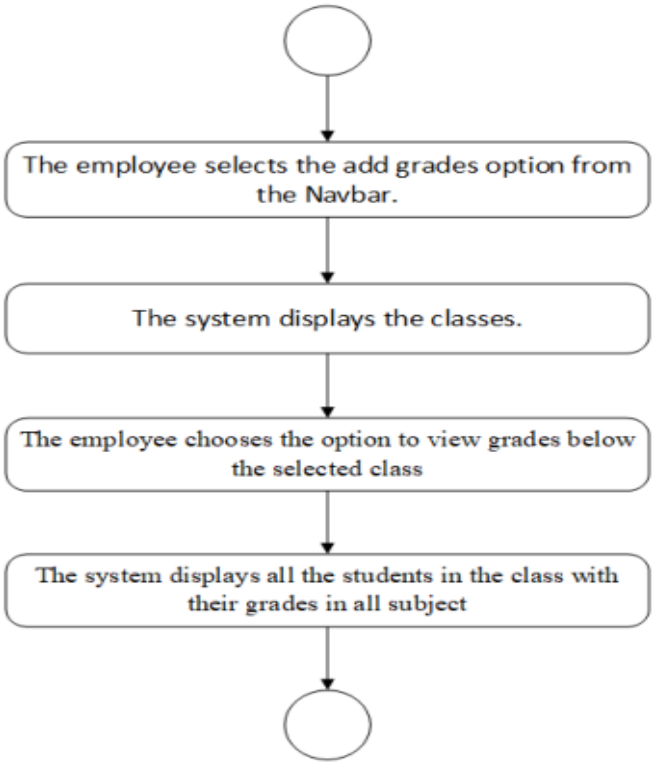


Figure 79. View grades Activity diagram

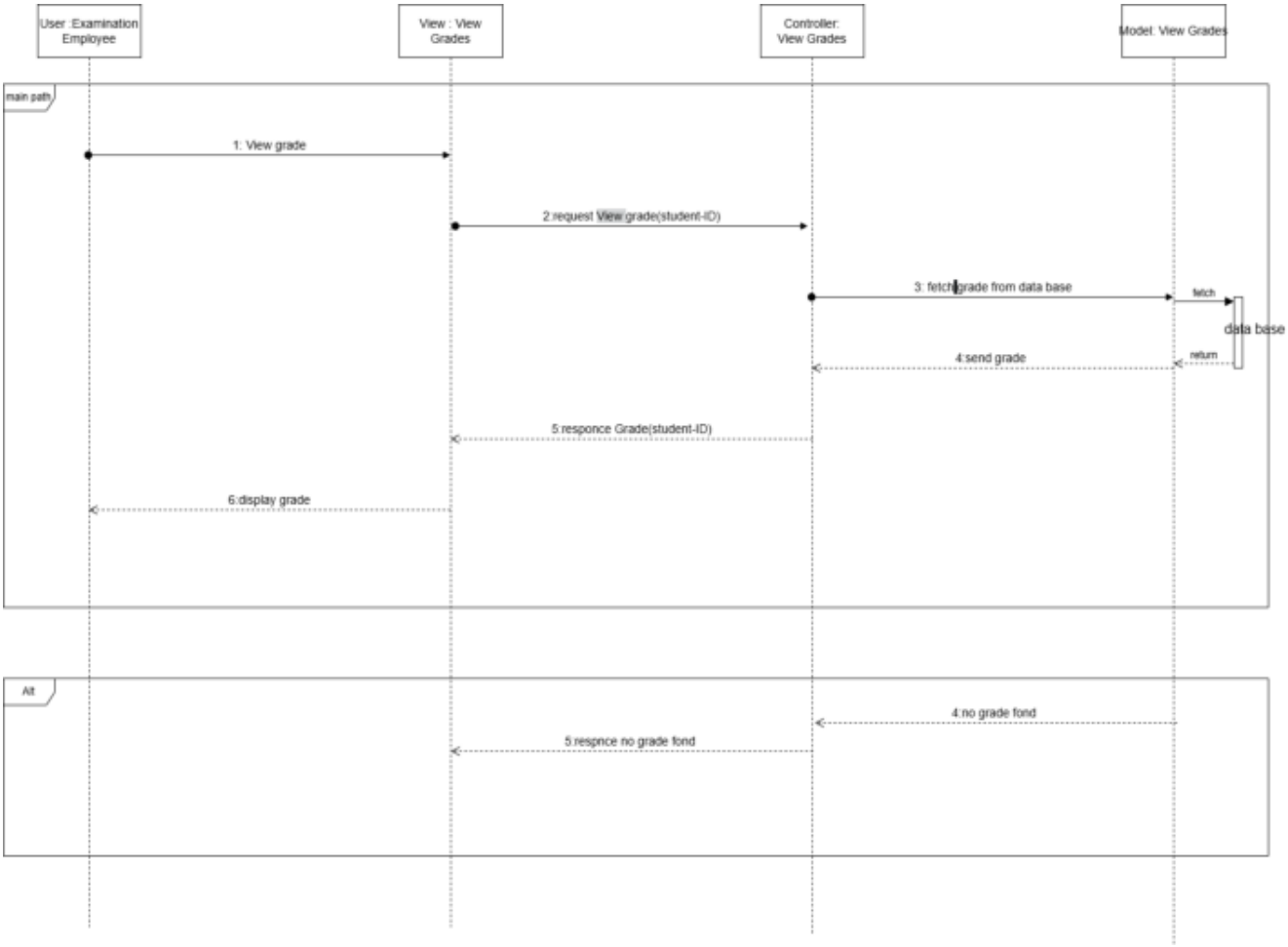


Figure 80. View grades Sequences diagram

37.Edit grades

ID	SCMS-37
Description	Edit grades
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Edit grades functionality
Main path	1. The employee selects the grades student option in his/her Navbar. 2. The system displays the existing classes. 3. The employee chooses the option to view grades below the selected class. 4. The system displays all students in the class with their grades in all subjects. 5. The employee filters the materials and then adjusts the required mark.
Subsequent terms	The student must have marks in at least one subject.
Alternate path	Not found

Table 45. Use Case Specification (Edit grades)

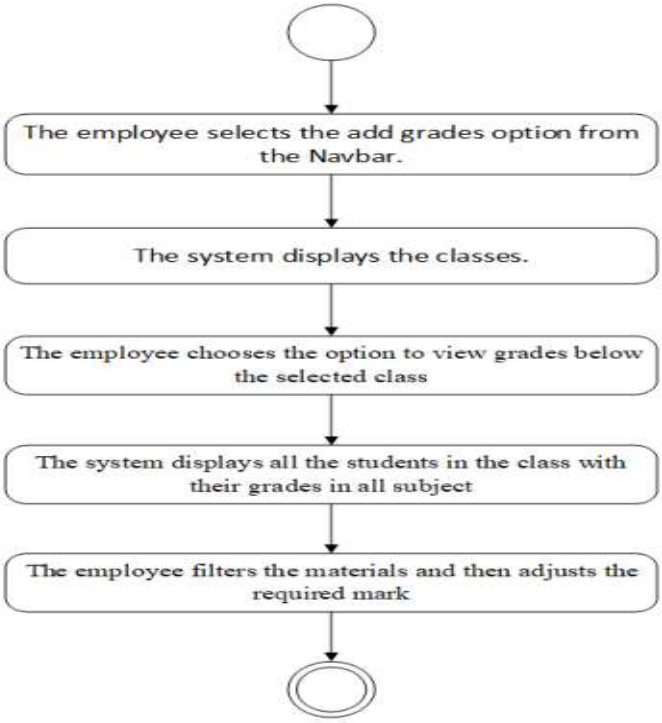


Figure 81. Edit grades Activity diagram

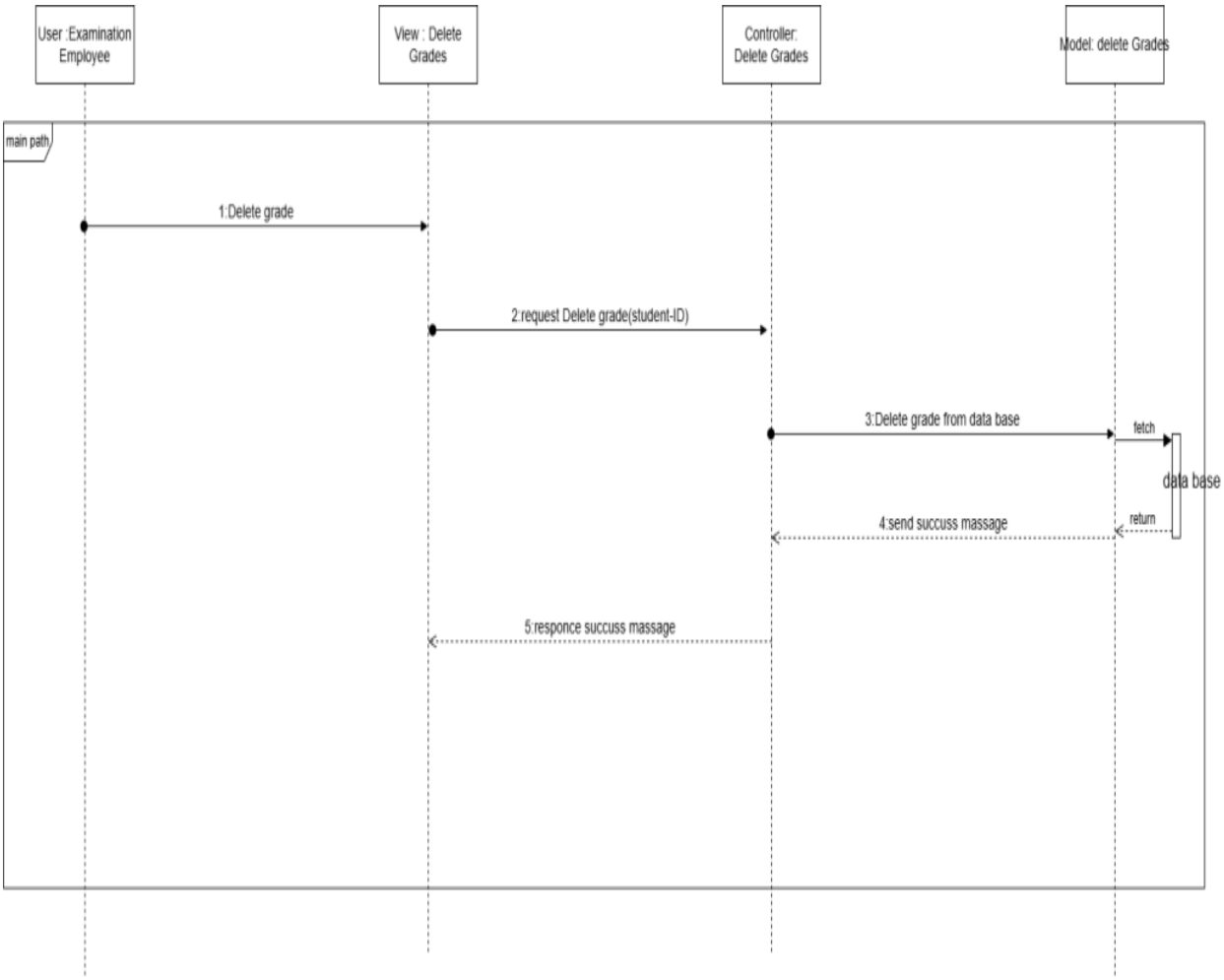


Figure 82. Edit grades Sequences diagram

38.Delete grades

ID	SCMS-38
Description	Delete grades
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Delete grades functionality
Main path	1. The employee selects the grades student option in his/her Navbar. 2. The system displays the existing classes. 3. The employee chooses the option to view grades below the selected class. 4. The system displays all students in the class with their grades in all subjects. 5. The employee filters the materials and then deletes the required mark.
Subsequent terms	The student must have marks in at least one subject.
Alternate path	Not found

Table 46. Use Case Specification (Delete grades)

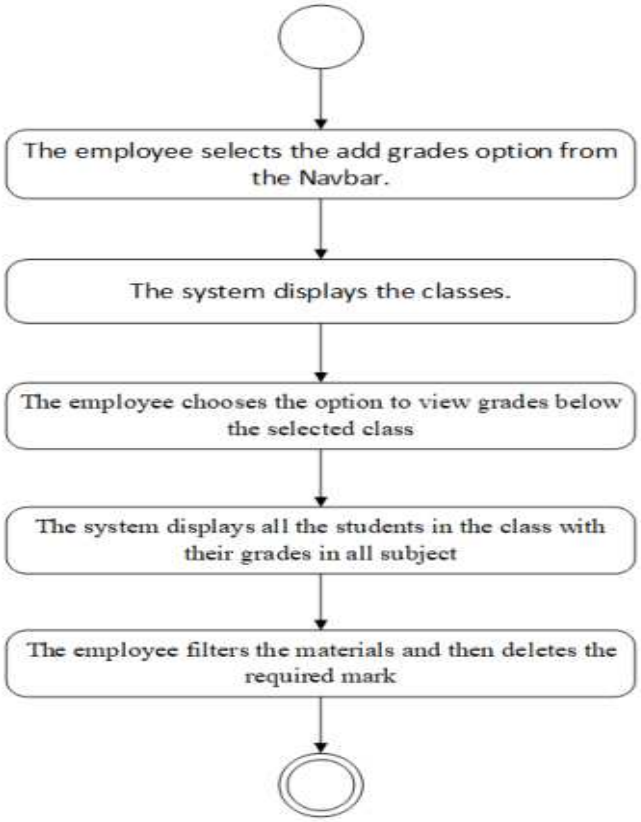


Figure 83. Delete grades Activity diagram

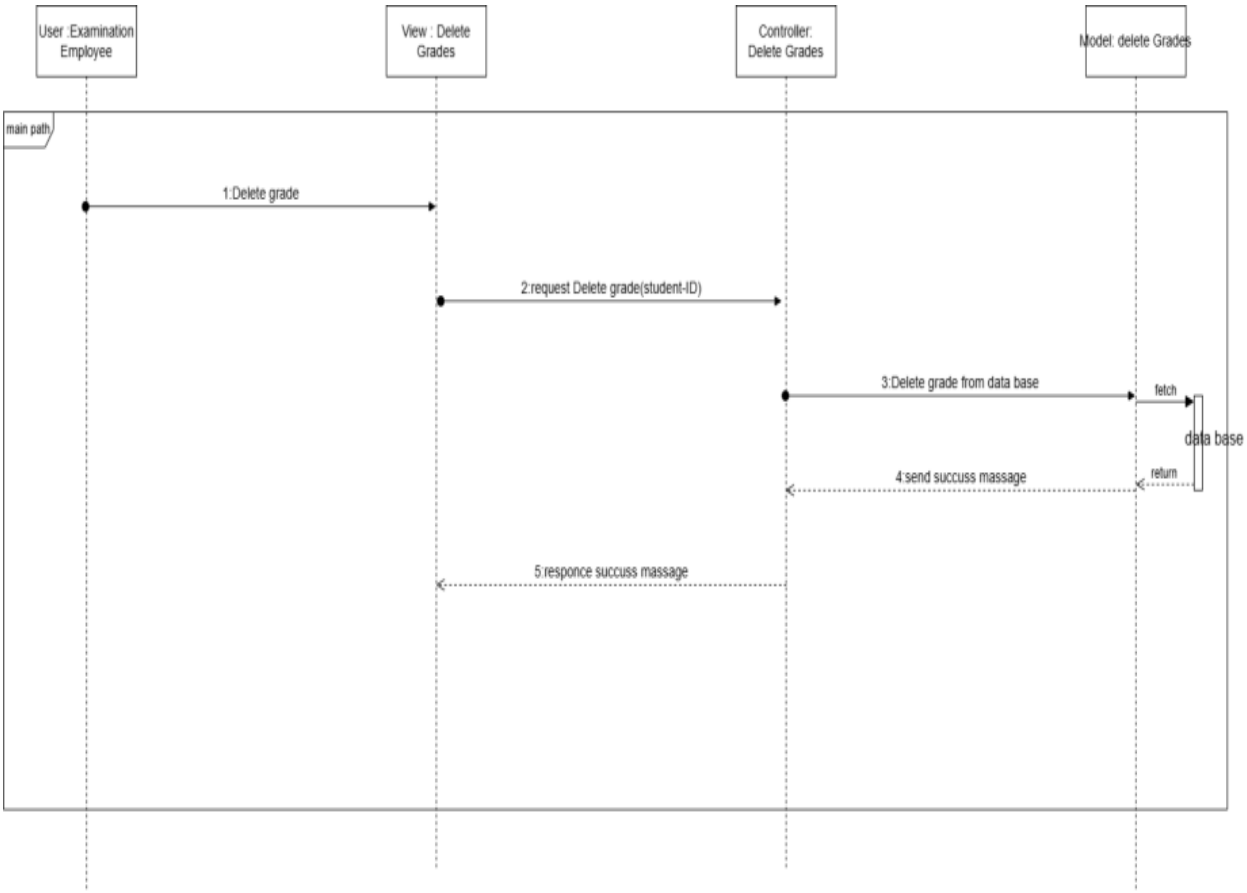


Figure 84. Delete grades Sequences diagram

39.Create schedule

ID	SCMS-39
Description	Create schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Delete grades functionality
Main path	1. manager accesses the function of Create an exam schedule in the system. 2. The system displays the existing classes. 3. The employee chooses the section in the class. 4. The system displays a form to create the class schedule for the department. 5. The employee enters the necessary data to create the study schedule. 6. The system creates the study schedule for the department, and the study schedules for the remaining departments are created automatically without any conflict.
Subsequent terms	The system displays the exam schedule after creation.
Alternate path	Not found

Table 47. Use Case Specification (Create schedule)

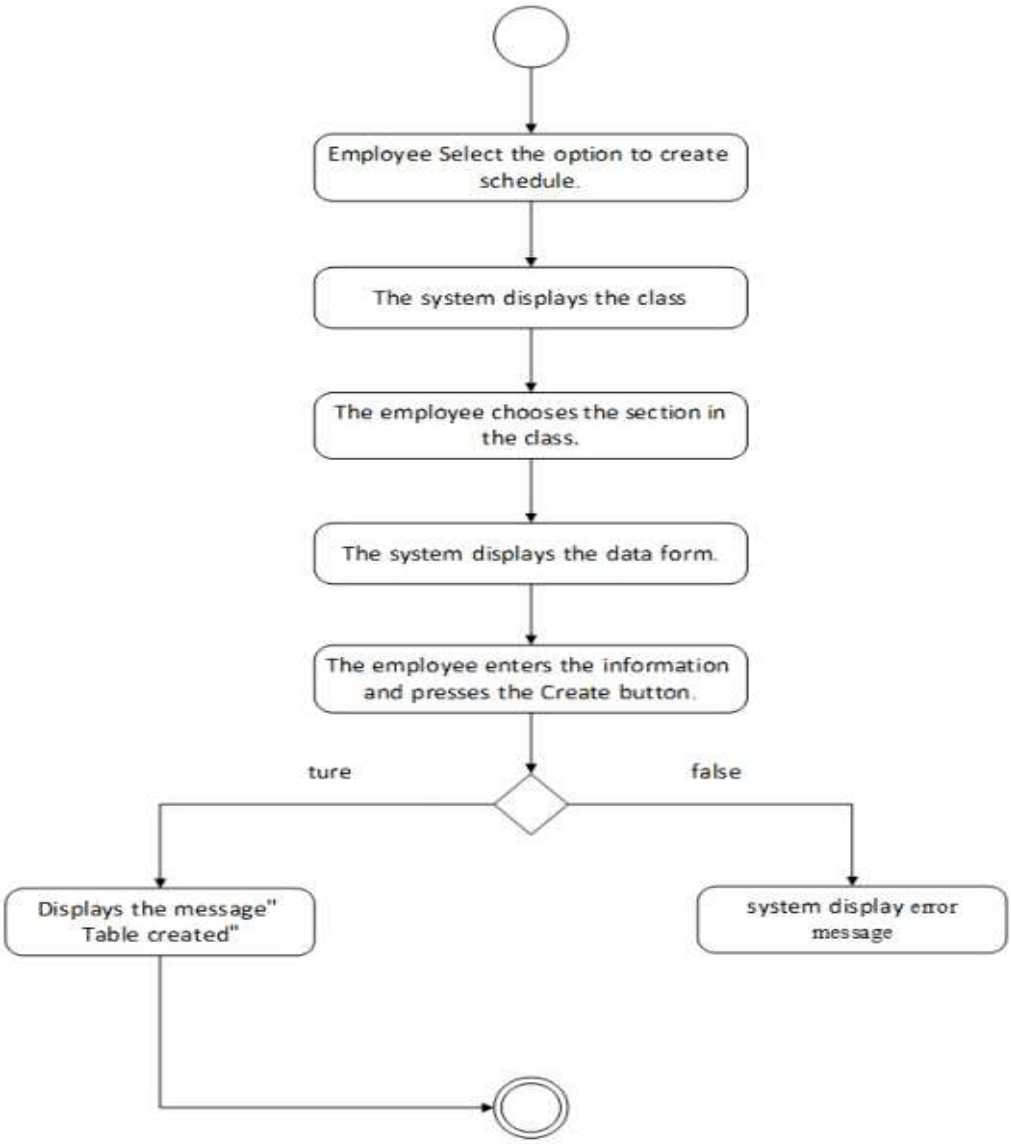


Figure 85. Create schedule Activity diagram

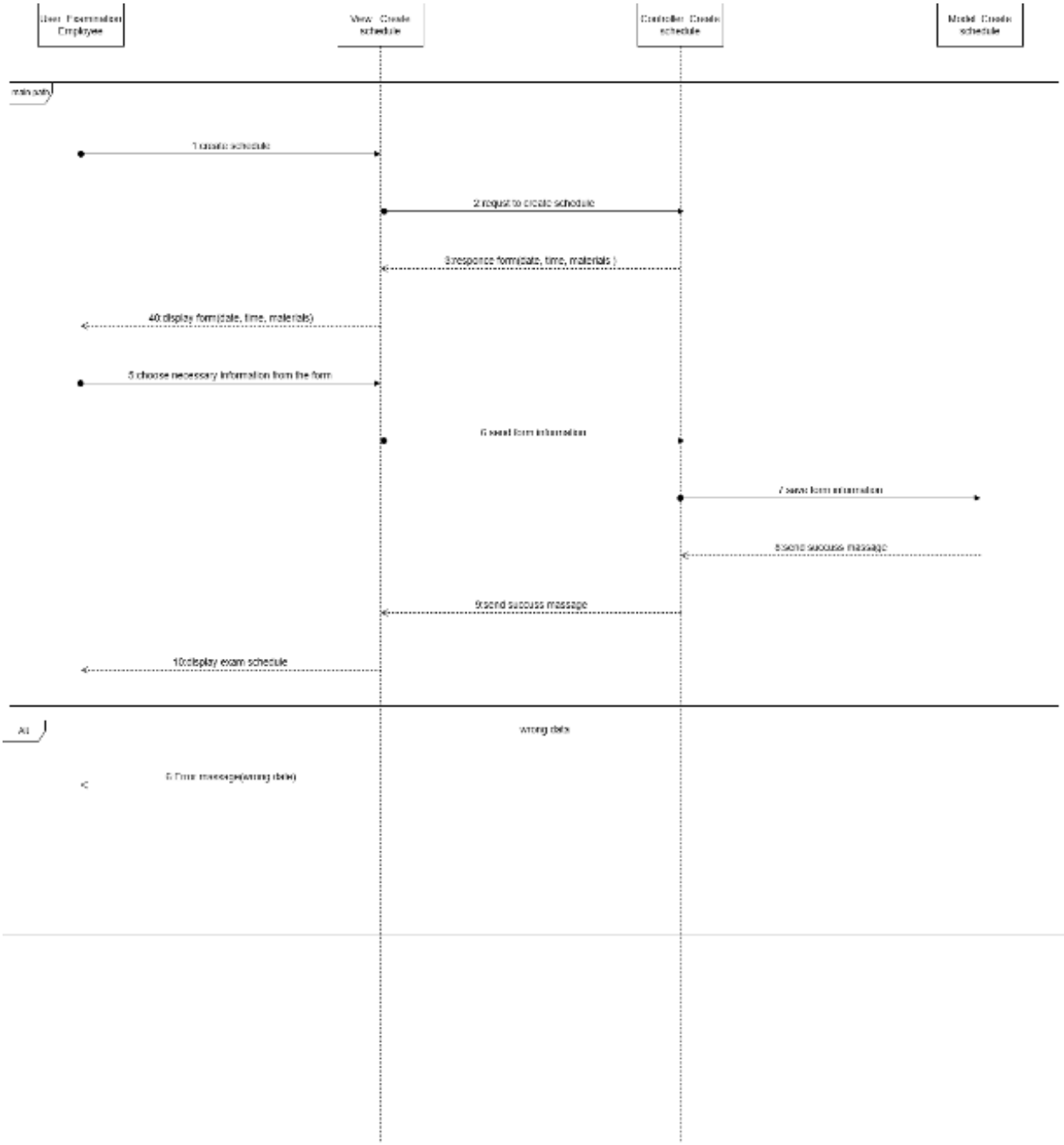


Figure 86. Create schedule Sequences diagram

40.Edit schedule

ID	SCMS-40
Description	Edit schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Edit schedule functionality
Main path	1. manager accesses the function of Edit schedule in the system. 2. The system displays the existing classes. 3. The employee chooses the option to display the tables below the class card. 4. The system displays all the tables for the class. 5. The employee chooses the modification option above the academic schedule. 6. The system displays a form with the old data and the possibility of changing the teacher and subject. 7. The employee clicks Save Table.
Subsequent terms	The system displays the exam schedule after creation.
Alternate path	If the data is wrong, an error message will be displayed.

Table 48. Use Case Specification (Edit schedule)

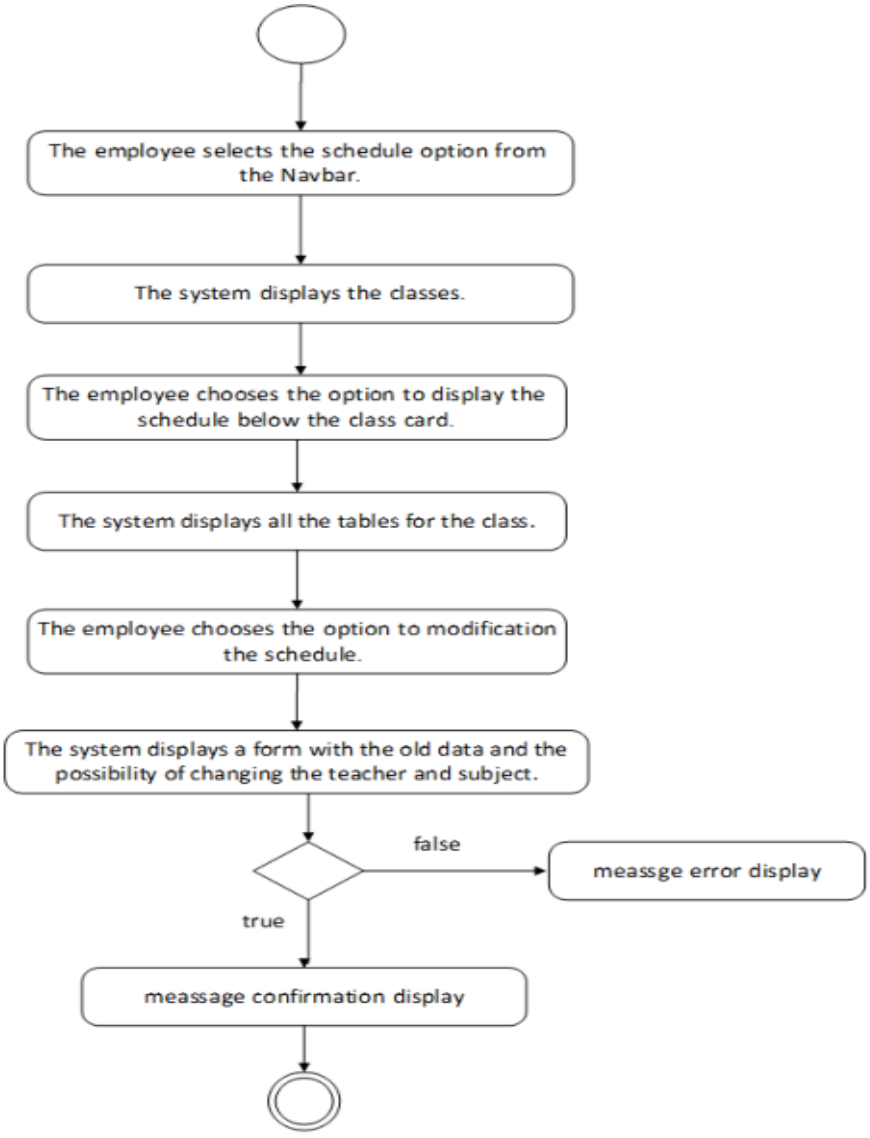


Figure 87. Edit schedule Activity diagram

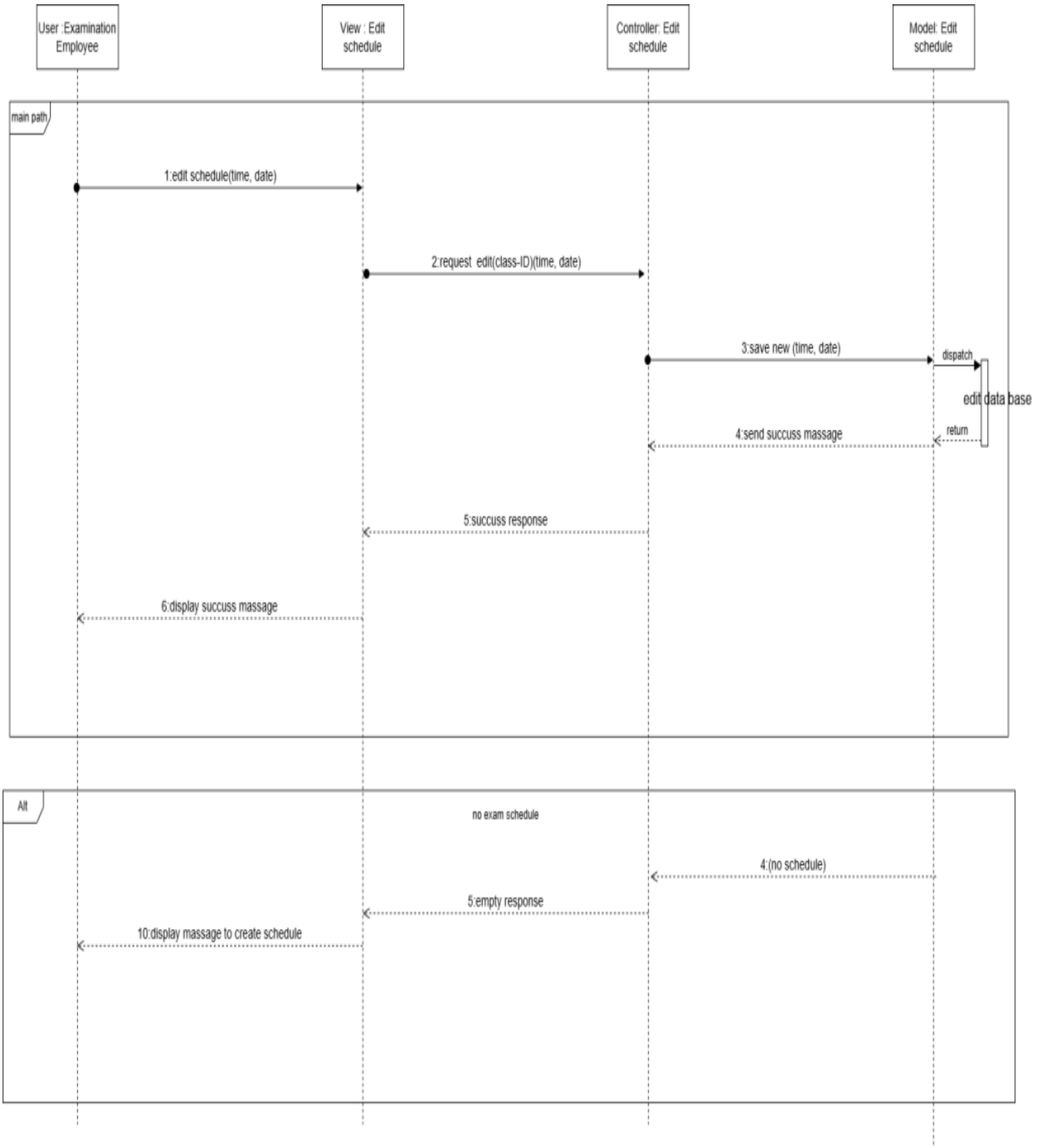


Figure 88. Edit schedule Sequences diagram

41.Delete schedule

ID	SCMS-41
Description	Delete schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the Delete schedule functionality
Main path	1. manager accesses the function of Delete schedule in the system. 2. The system displays the existing classes. 3. The employee chooses the option to display the tables below the class card. 4. The system displays all the tables for the class. 5. The employee chooses the delete option above the academic schedule. 6. The system deleted the schedule.
Subsequent terms	Delete the table from the database
Alternate path	Not found

Table 49. Use Case Specification (Delete schedule)

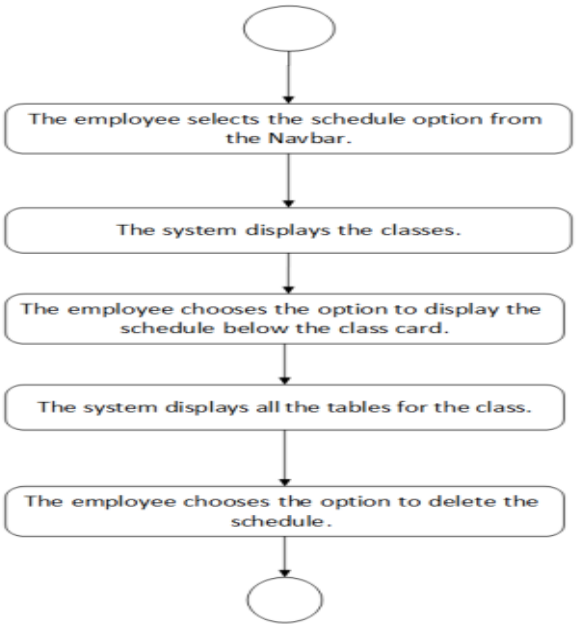


Figure 89. Delete schedule Activity diagram

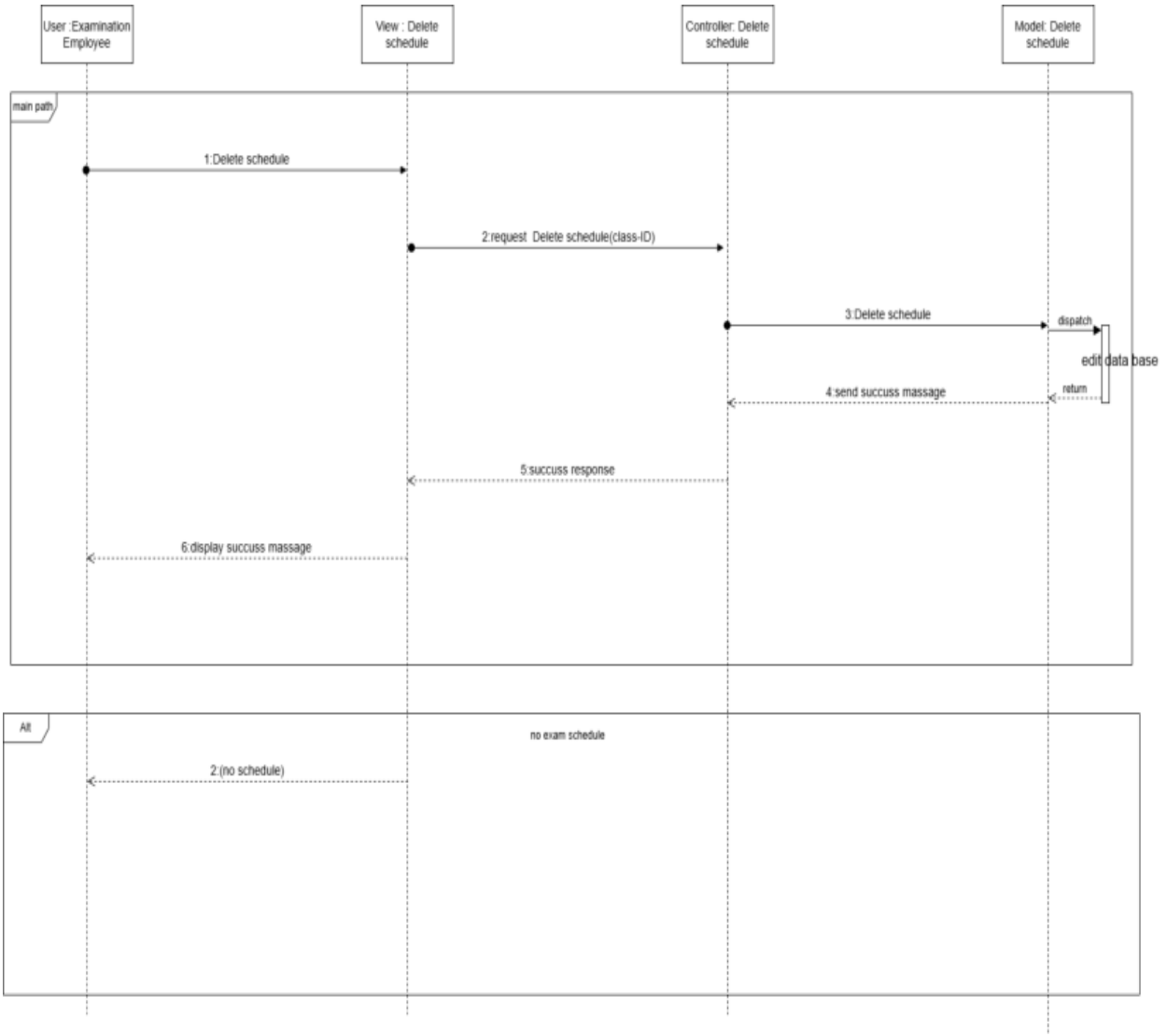


Figure 90. Delete schedule Sequences diagram

42.View schedule

ID	SCMS-42
Description	View schedule
Actors	Examination Employee
Preconditions	• Examination Employee must have an account in the system and access to the View schedule functionality
Main path	1. manager accesses the function of Delete schedule in the system. 2. The system displays the existing classes. 3. The employee chooses the option to display the tables below the class card. 4. The system displays all the tables for the class.
Subsequent terms	Not found
Alternate path	Not found

Table 50. Use Case Specification (View schedule)

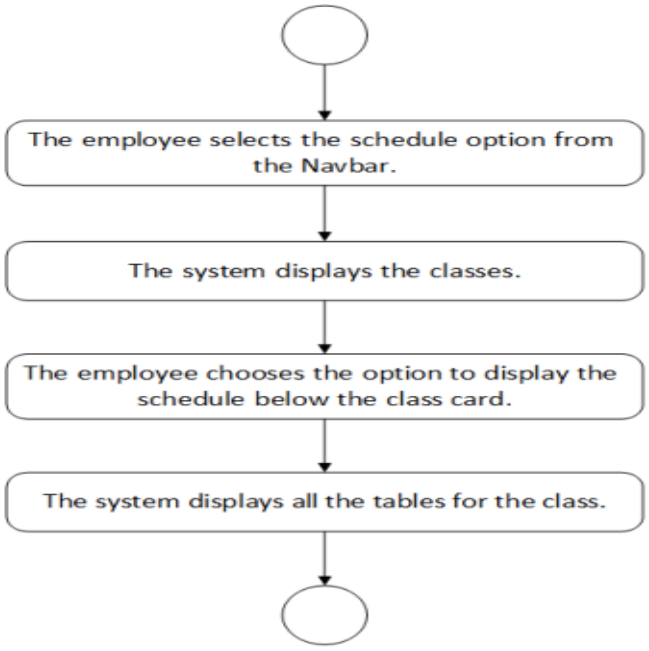


Figure 91. View schedule Activity diagram

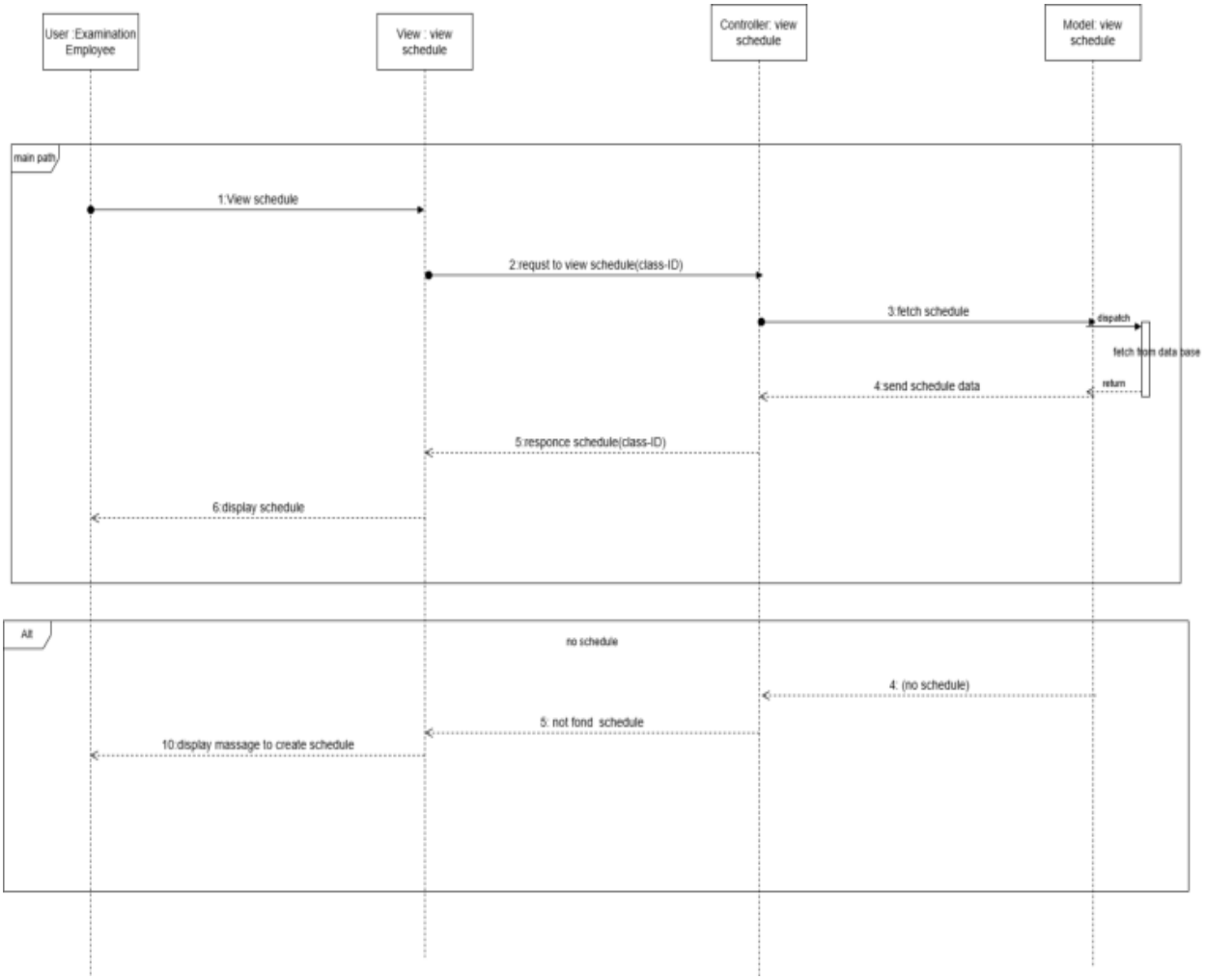


Figure 92. View schedule Sequences diagram

60.Student promotion

ID	SCMS-60
Description	Student promotion
Actors	Employee
Preconditions	• The Employee must have an account in the system • The Employee must log in to the system
Main path	1. Employee click on Student promotion link 2. The system displays the classes. 3. The teacher selects the class to display the students in the class. 4. The system displays all eligible and ineligible students. 5. The employee identifies eligible students and presses the Promote Students button. 6. The system checks the data. If it is correct, the student is transferred to the next grade.
Subsequent terms	
Alternate path	If the data is incorrect, an error message is displayed and the employee is directed to step 5.

Table 51. Use Case Specification (Student promotion)

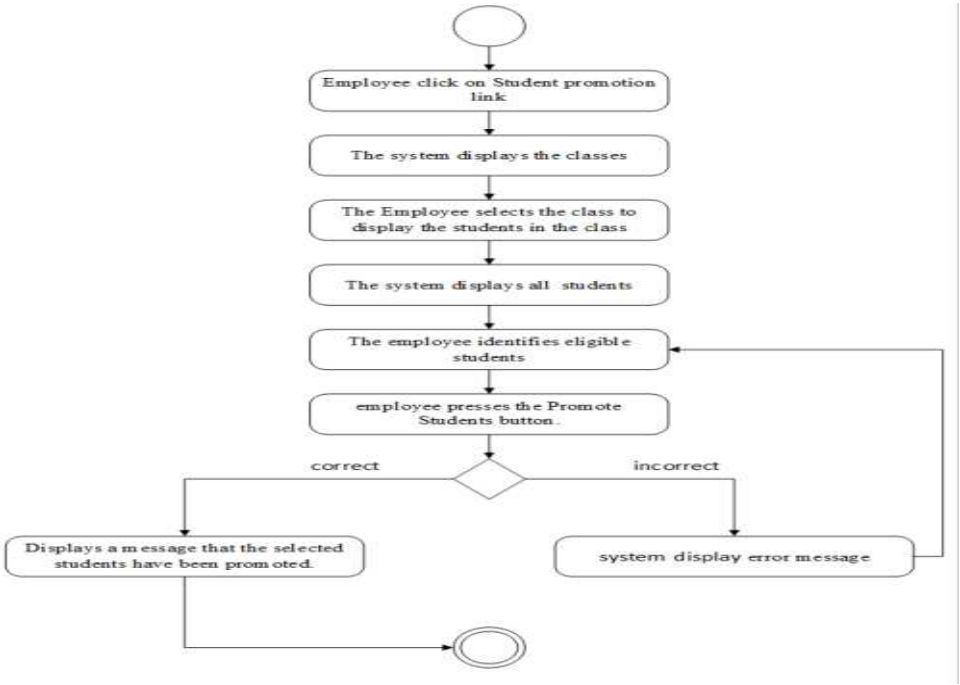


Figure 129. Student promotion Activity diagram

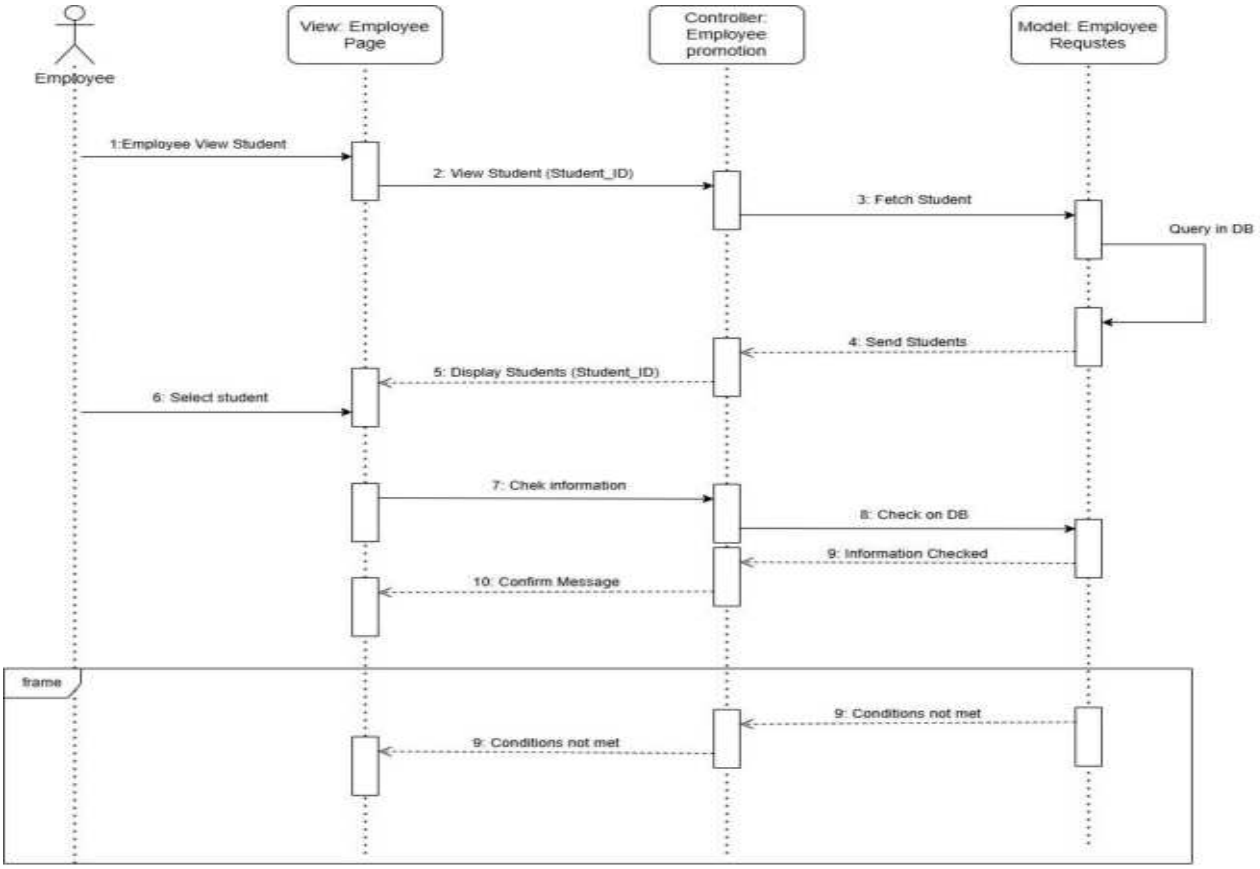


Figure 130. Student promotion Sequences diagram

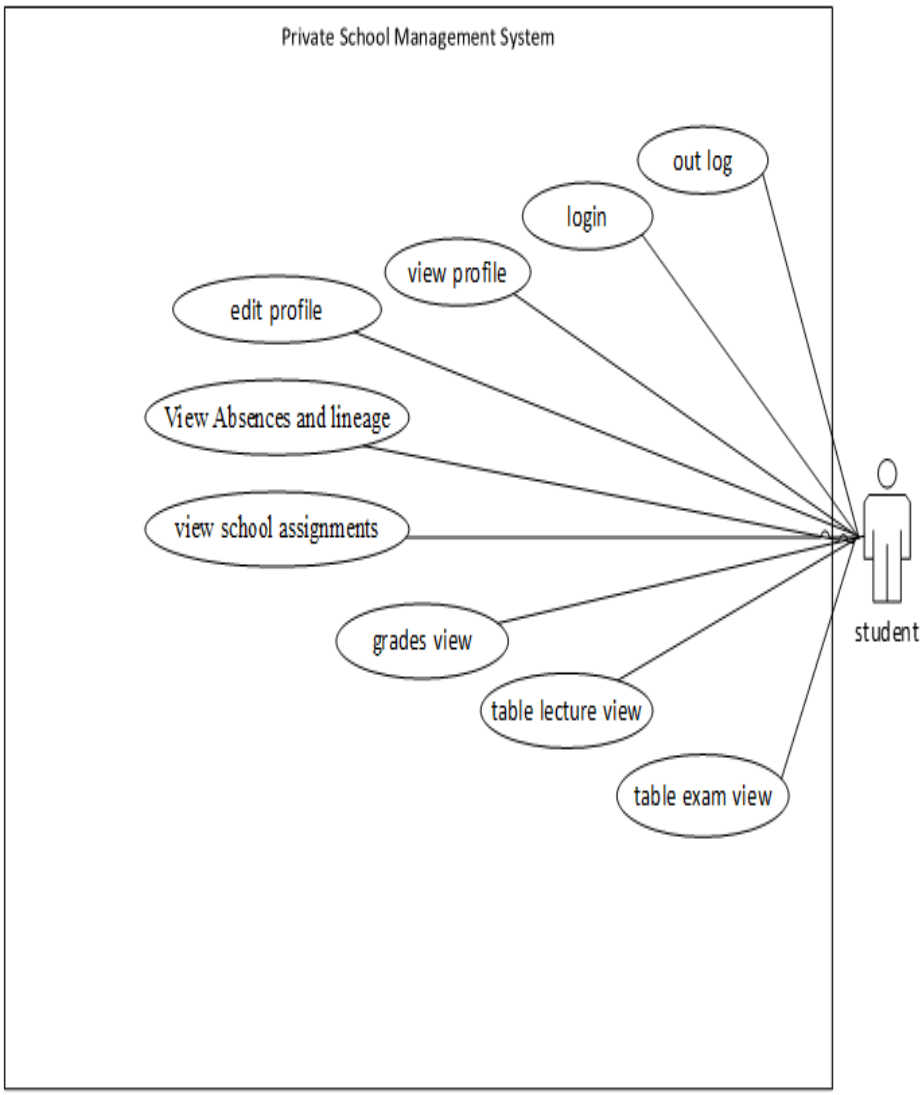


Figure 95. UseCase low level Student

43. login

ID	SCMS-43
Description	login
Actors	Student
Preconditions	• The student must have an account in the system • The student must have a valid username and password • The system must be available and accessible
Main path	1. The student provides the User name and password to the system 2. The system verifies the validity of the User name and password in the database 3. If the information is correct, the system logs in successfully
Subsequent terms	Redirecting the user to his home page
Alternate path	1. If the information is incorrect, the system sends an error message and directs the user to enter the User name and password again.

Table 52. Use Case Specification (login)

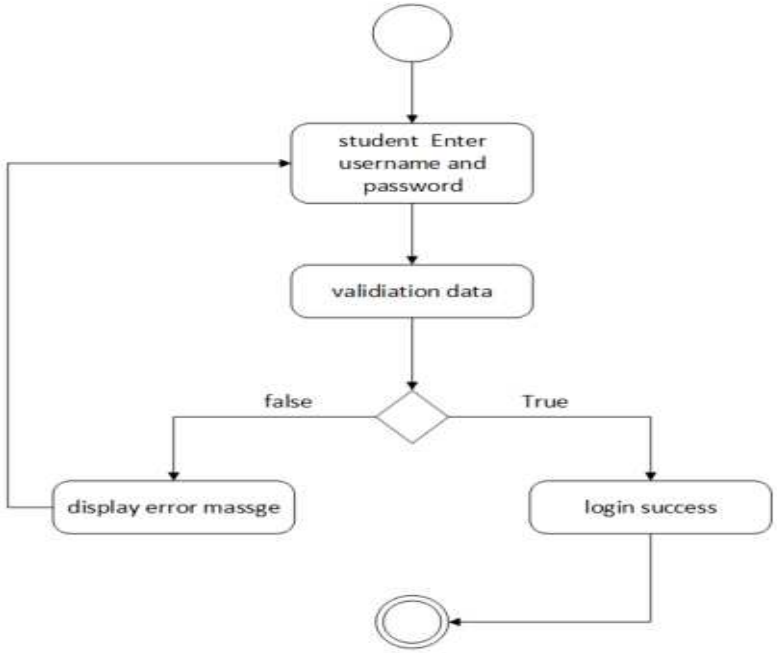


Figure 96. login Activity diagram

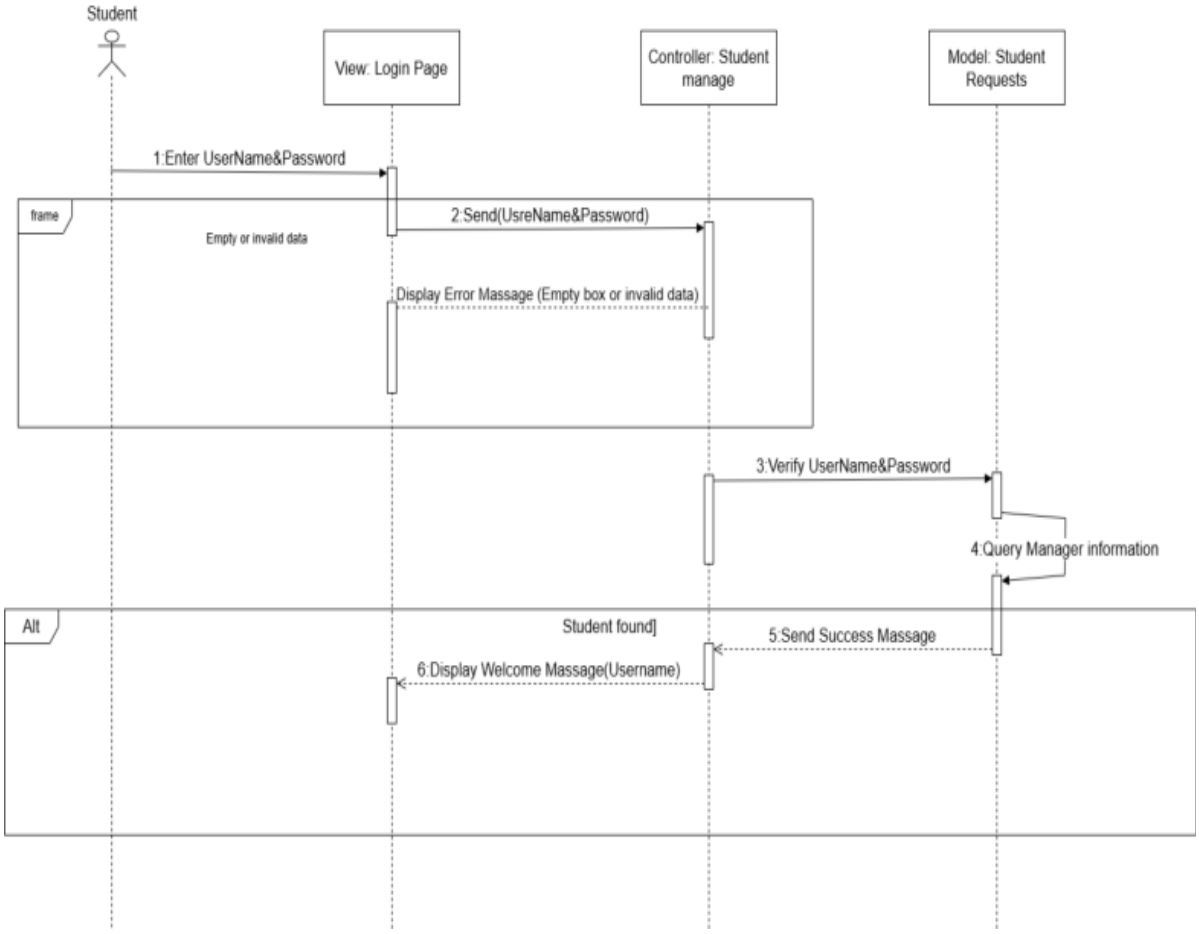


Figure 97. login Sequences diagram

44.Log out

ID	SCMS-44
Description	Log out
Actors	Student
Preconditions	The system should have a clear button or link to log out
Main path	1- Student click on logout bottom 2- System redirect Student to welcome page
Subsequent terms	The student is blocked from accessing any system resources until he logs in again

Table 53. Use Case Specification (Log out)

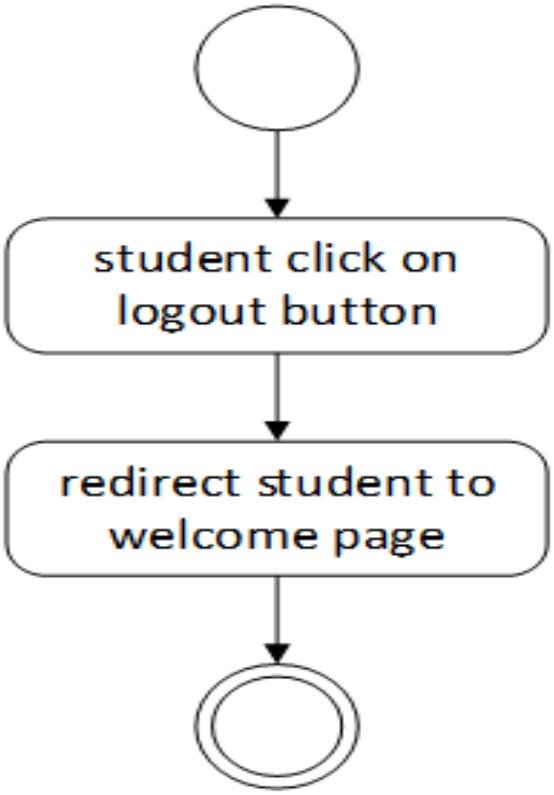


Figure 98. Log out Activity diagram

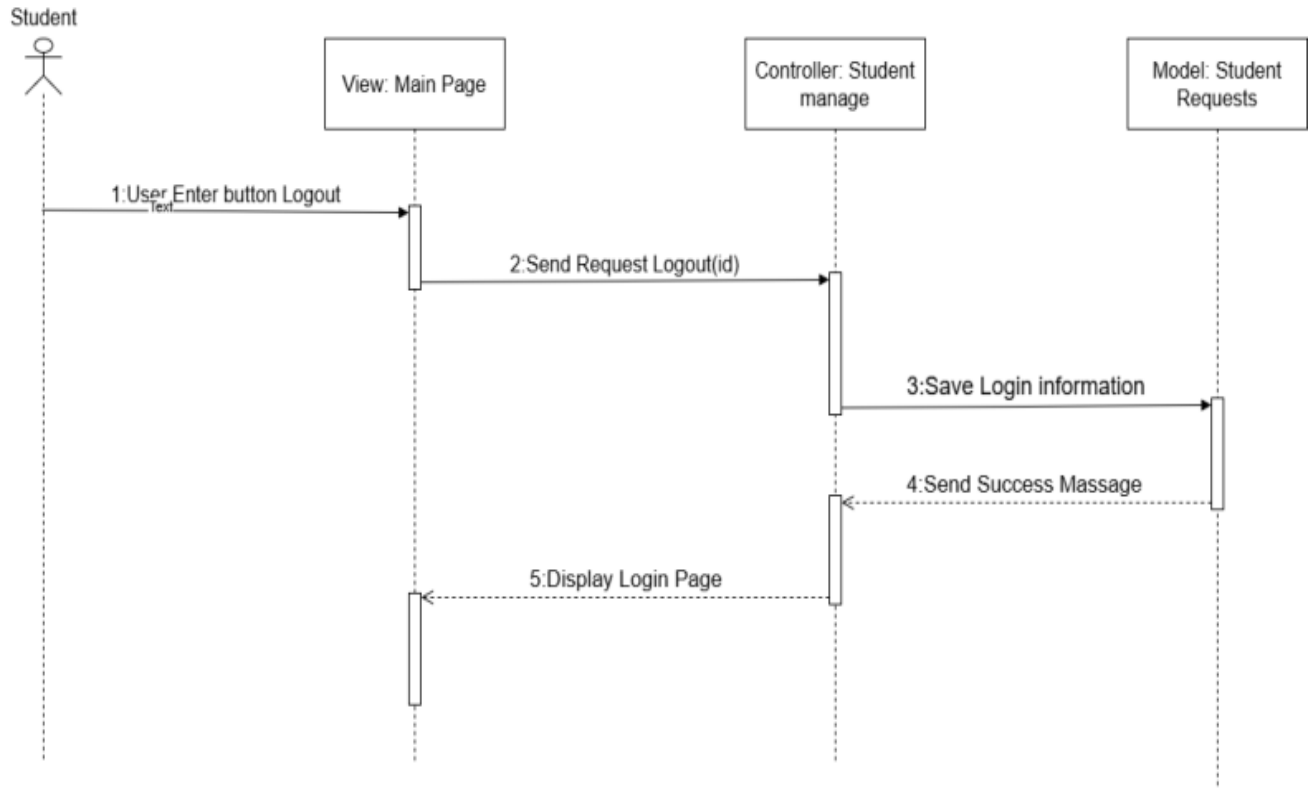


Figure 99. Log out Sequences diagram

45. View profile (information personal)

ID	SCMS-45
Description	View profile (information personal)
Actors	Student
Preconditions	• The student must have an account in the system • The student must log in to the system
Main path	1- Student click on My profile link 2- System get data from database and displays profile information
Subsequent terms	

Table 54. Use Case Specification (View profile (information personal))

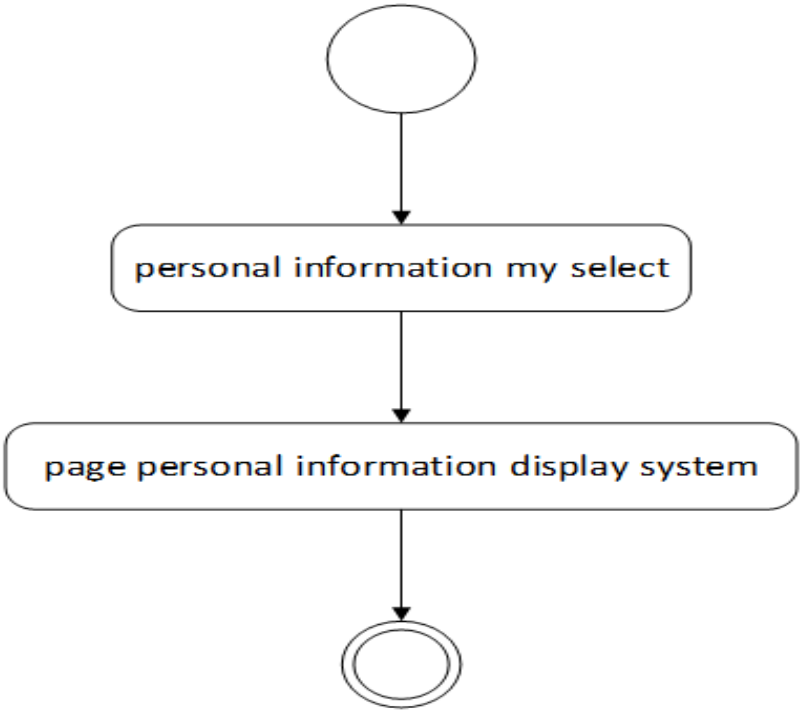


Figure 100. View profile (information personal) Activity diagram

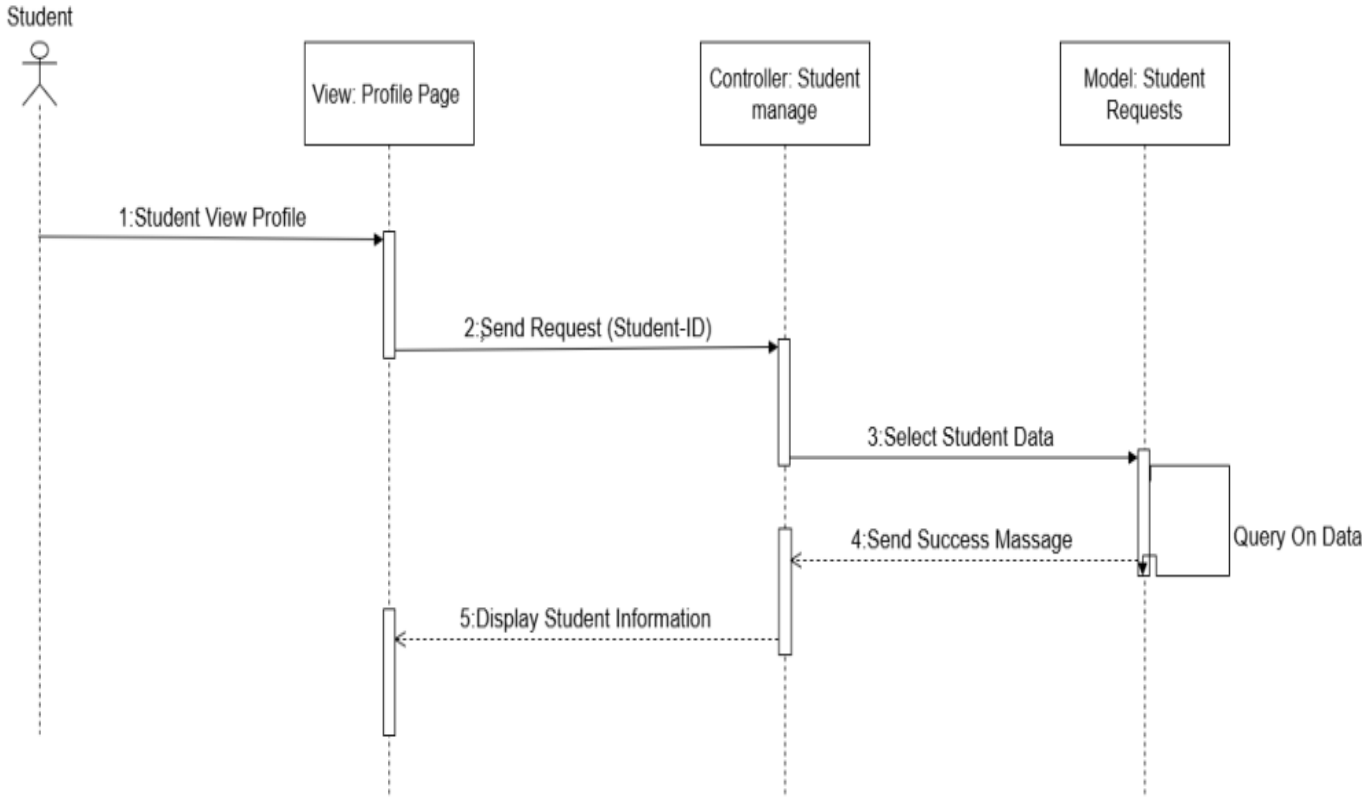


Figure 101. View profile (information personal) Sequences diagram

46. Edit profile (information personal)

ID	SCMS-46
Description	Edit profile (information personal)
Actors	Student
Preconditions	Student must have accounts in the system
Main path	1. Student click on Edit bottom in My profile page 2. System display Edit form and asks user to edits data 3. Student enter a new data 4. System validates a new data and show anew information
Subsequent terms	Update relevant information throughout the system
Alternate path	Employee enter invalid data system display an error and go to step '3'

Table 55. Use Case Specification (Edit profile (information personal))

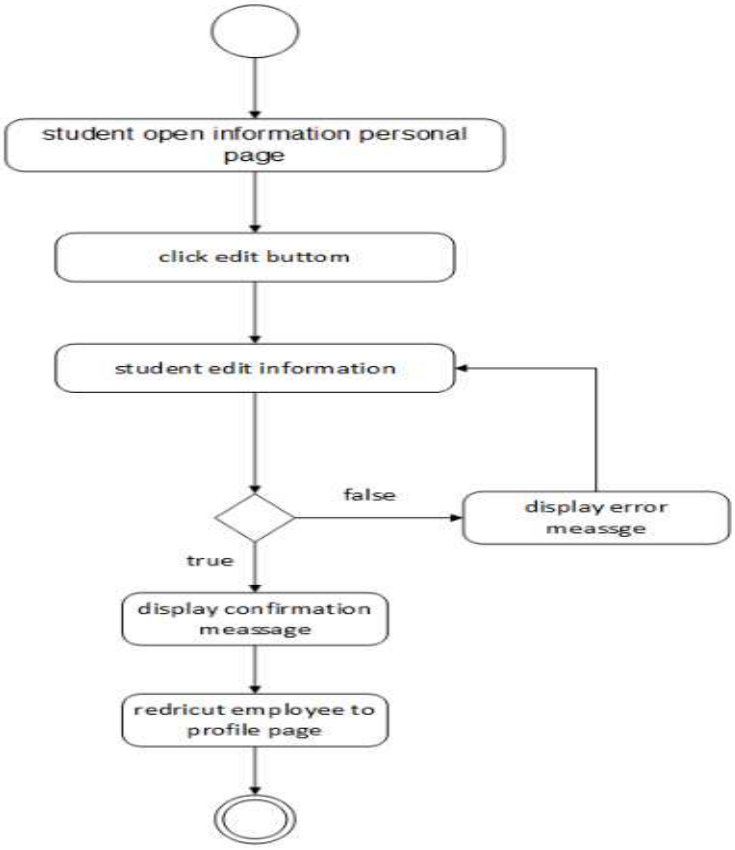


Figure 102. Edit profile (information personal) Activity diagram

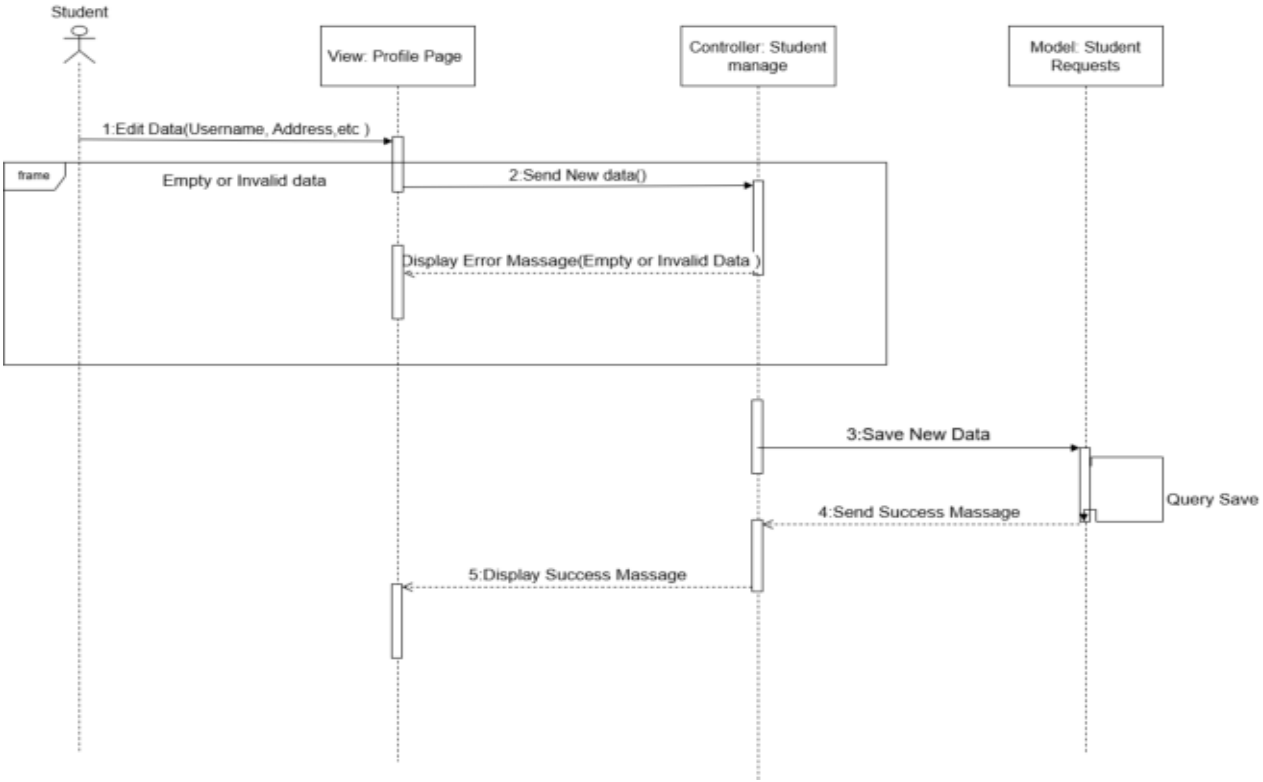


Figure 103. Edit profile (information personal) Sequences diagram

47.View grades

ID	SCMS-47
Description	View grades
Actors	Student
Preconditions	• The student must have an account in the system • The student must log in to the system
Main path	1. Student click on Grades link 2. System get data from database and displays grades information
Subsequent terms	

Table 56. Use Case Specification (View grades)

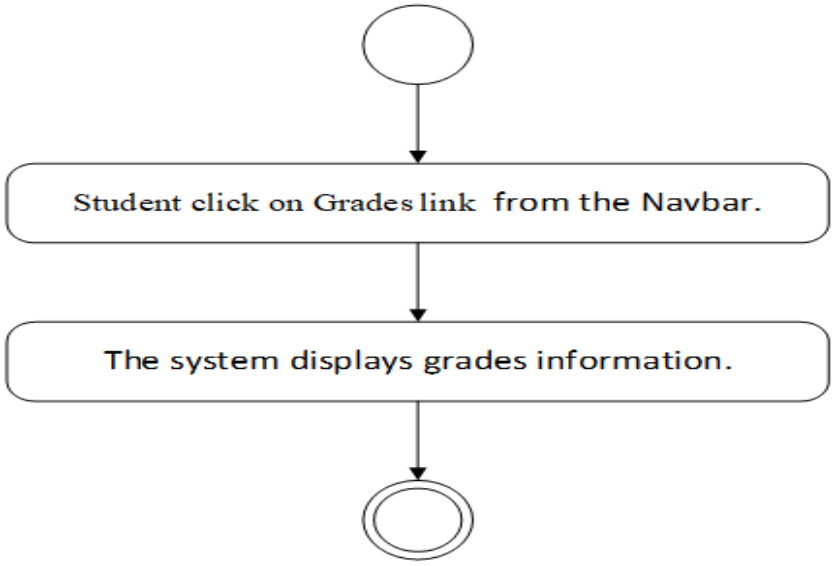


Figure 104. View grades Activity diagram

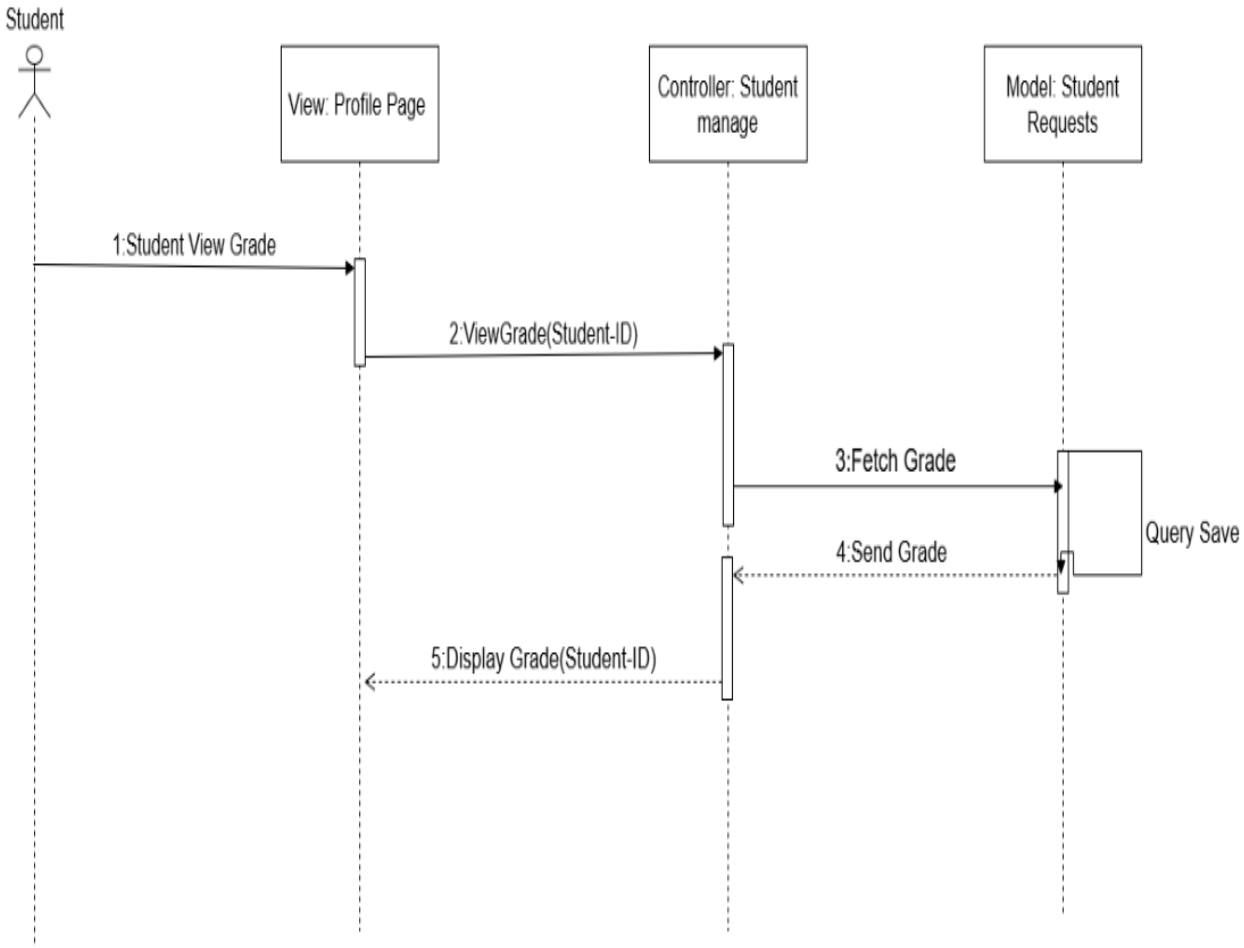


Figure 105. View grades Sequences diagram

48.View Exam Schedule

ID	SCMS-48
Description	View Exam Schedule
Actors	Student
Preconditions	• The student must have an account in the system • The student must log in to the system
Main path	1. Student click on Exam Schedule link 2. System get data from database and displays exam schedule information
Subsequent terms	

Table 57. Use Case Specification (View Exam Schedule)

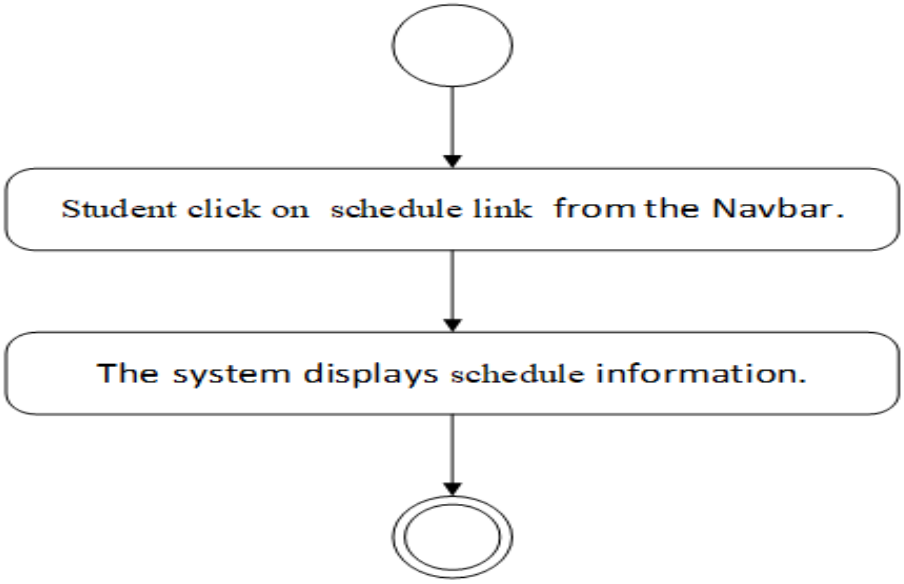


Figure 106. View Exam Schedule Activity diagram

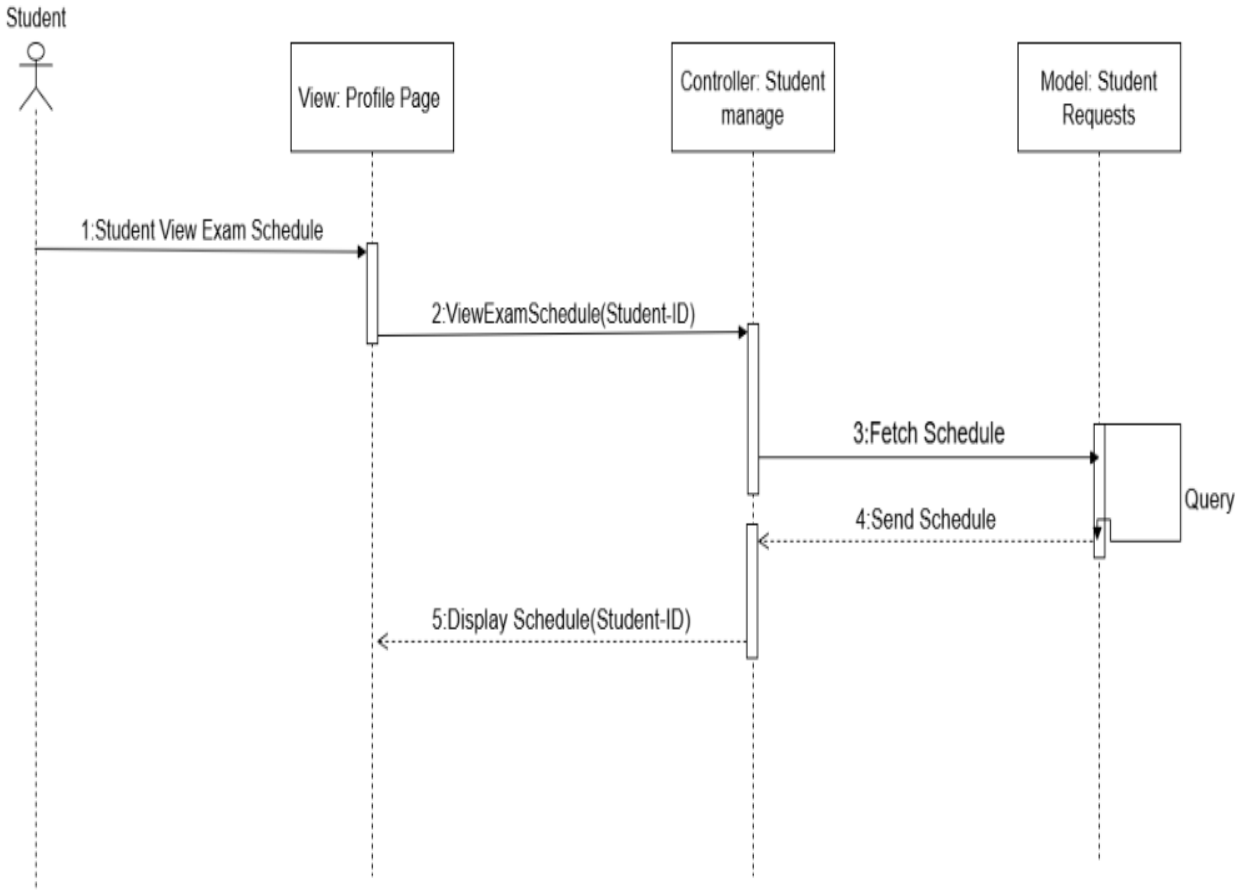


Figure 107. View Exam Schedule Sequences diagram

49.View Schedule

ID	SCMS-49
Description	View Schedule
Actors	Student
Preconditions	• The student must have an account in the system • The student must log in to the system
Main path	1. Student click on Schedule link 2. System get data from database and displays schedule information
Subsequent terms	

Table 58. Use Case Specification (View Schedule)

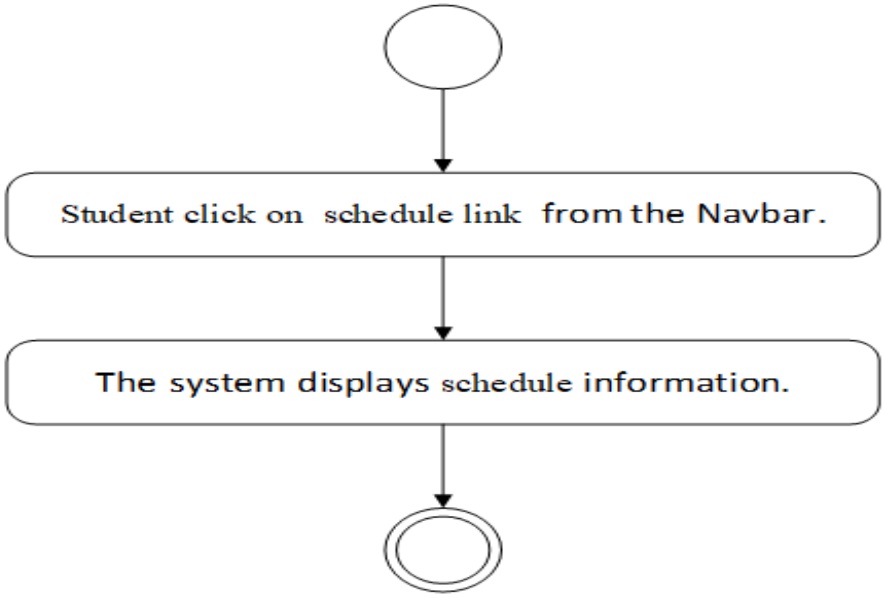


Figure 108. View Schedule Activity diagram

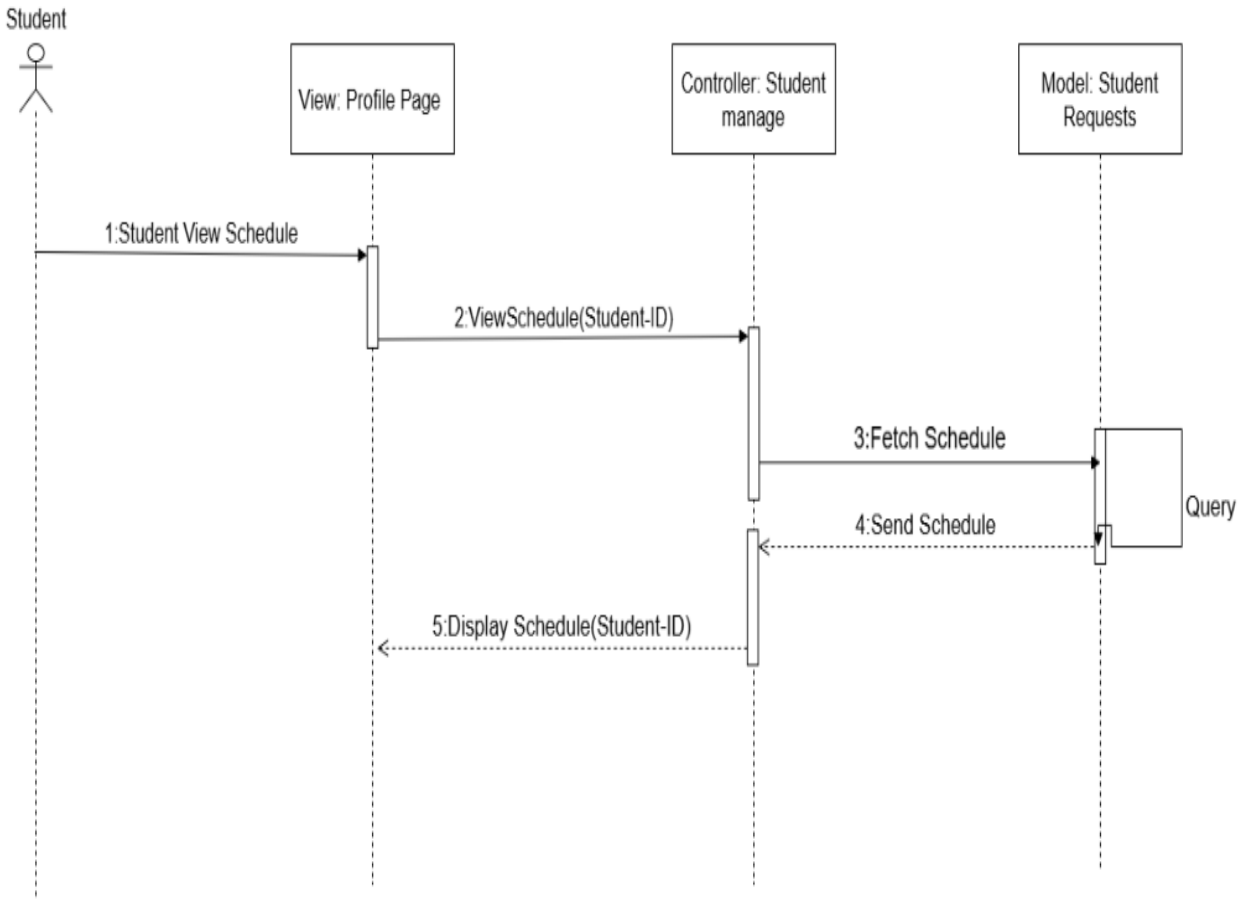


Figure 109. View Schedule Sequences diagram

50.View Absences and lineage

ID	SCMS-50
Description	View Absences and lineage
Actors	Student
Preconditions	• The student must have an account in the system • The student must log in to the system
Main path	1. Student click on Absences and lineage link 2. System get data from database and displays Absences and lineage information
Subsequent terms	

Table 59. Use Case Specification (View Absences and lineage)

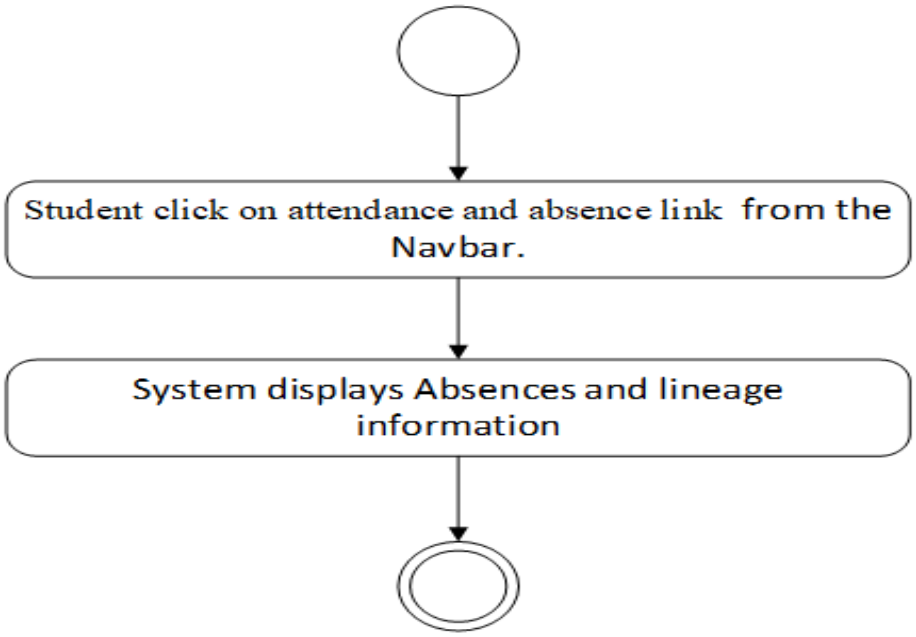


Figure 110. View Absences and lineage Activity diagram

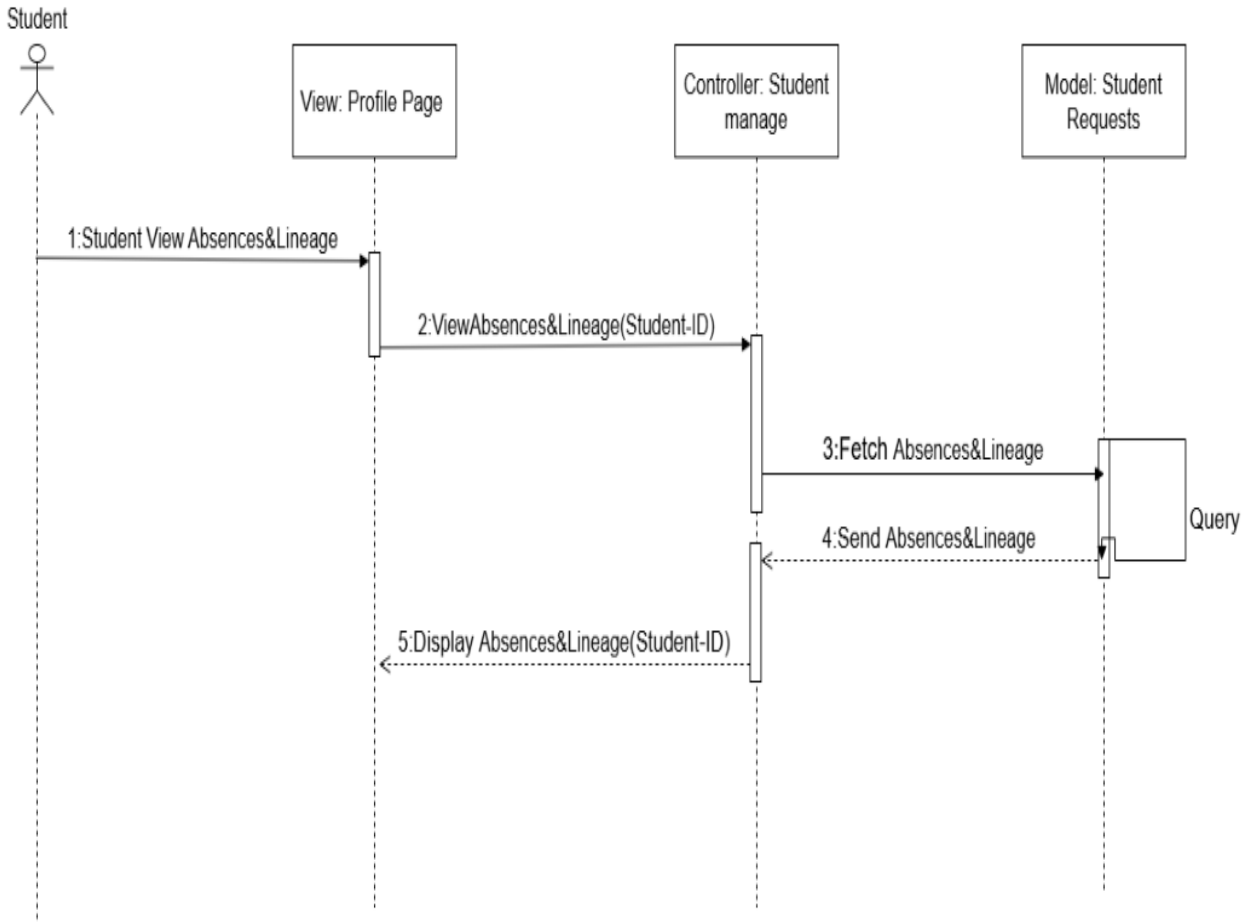


Figure 111. View Absences and lineage Sequences diagram

59.view school assignments

ID	SCMS-59
Description	view school assignments
Actors	Student
Preconditions	• The Student must have an account in the system • The Student must log in to the system
Main path	1. Student click on w school assignments link 2. The system displays assignments for each subject.
Subsequent terms	

Table 60. Use Case Specification (view school assignments)

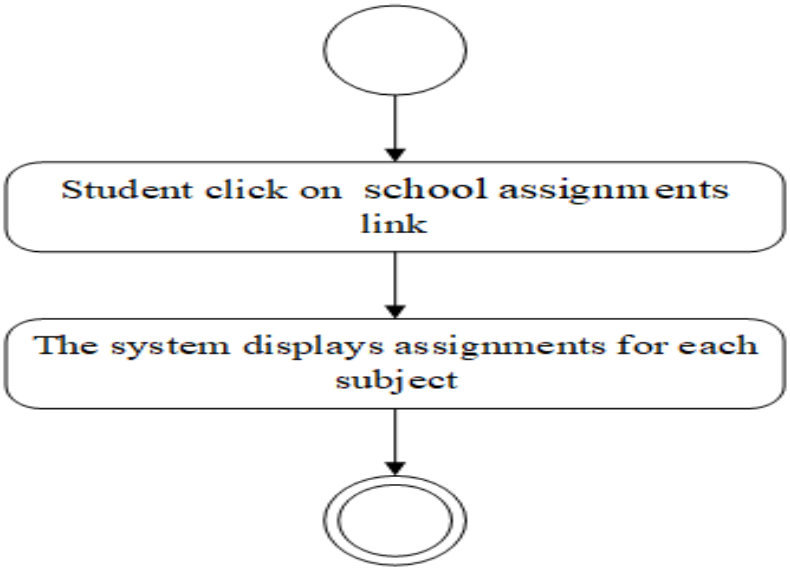


Figure 112. view school assignments Activity diagram

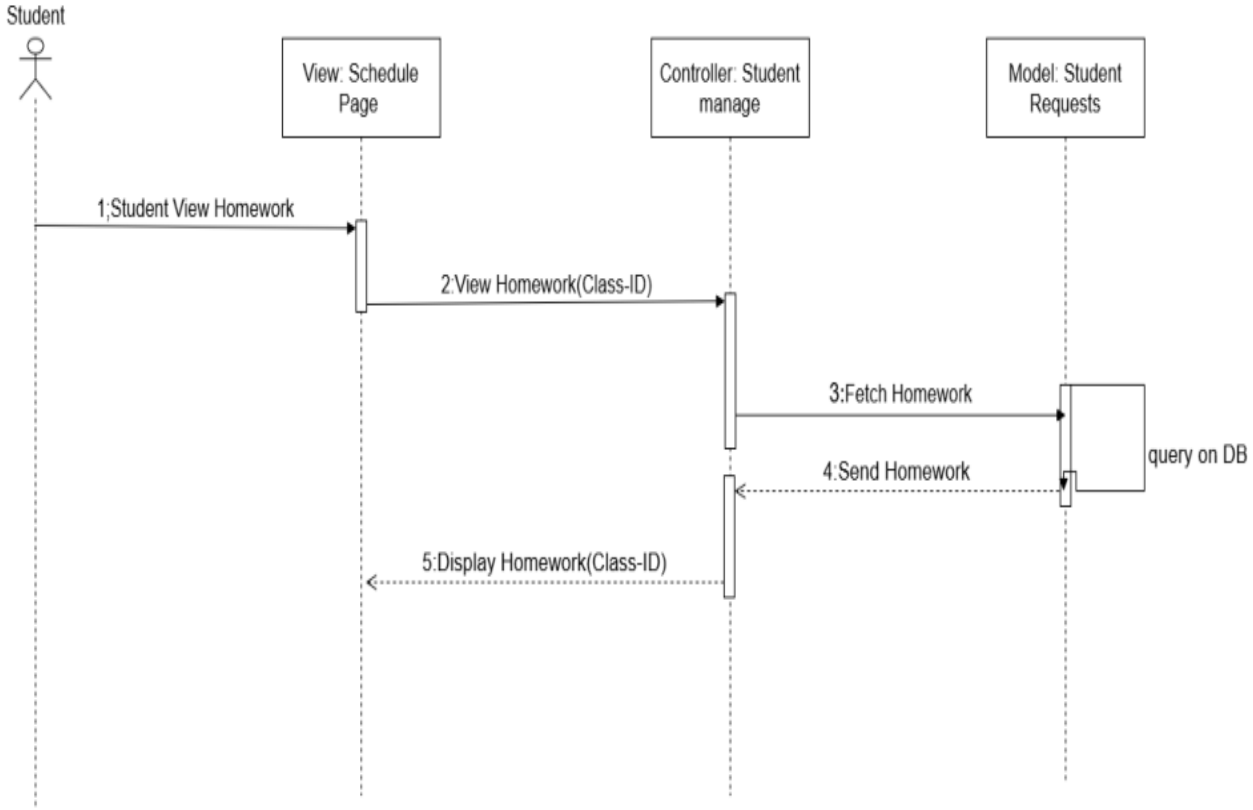


Figure 113. view school assignments Sequences diagram

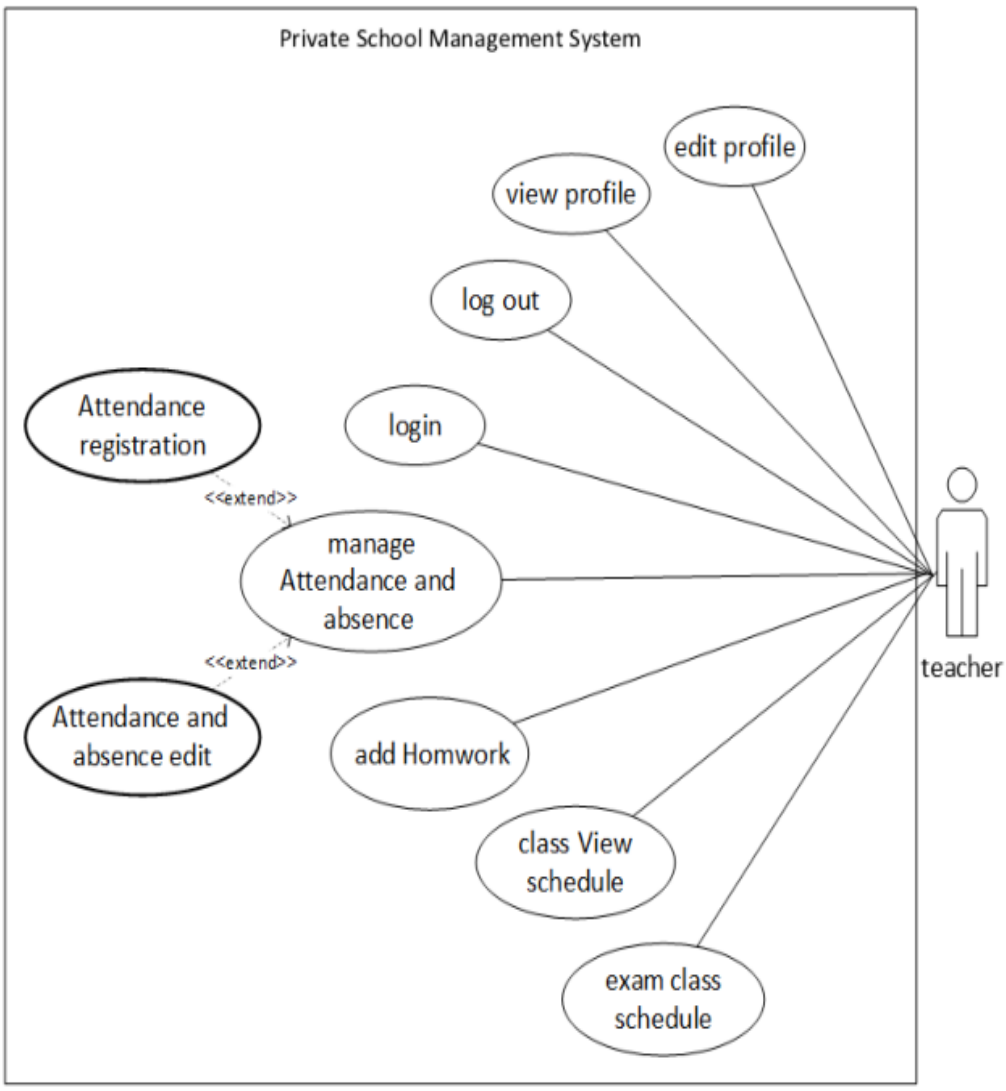


Figure 114. UseCase low level Teacher

51.login

ID	SCMS-51
Description	login
Actors	Teacher
Preconditions	• The Teacher must have an account in the system • The Teacher must have a valid username and password • The system must be available and accessible
Main path	1. The Teacher provides the User name and password to the system 2. The system verifies the validity of the User name and password in the database 3. If the information is correct, the system logs in successfully
Subsequent terms	Redirecting the user to his home page
Alternate path	1. If the information is incorrect, the system sends an error message and directs the user to enter the User name and password again.

Table 61. Use Case Specification (login)

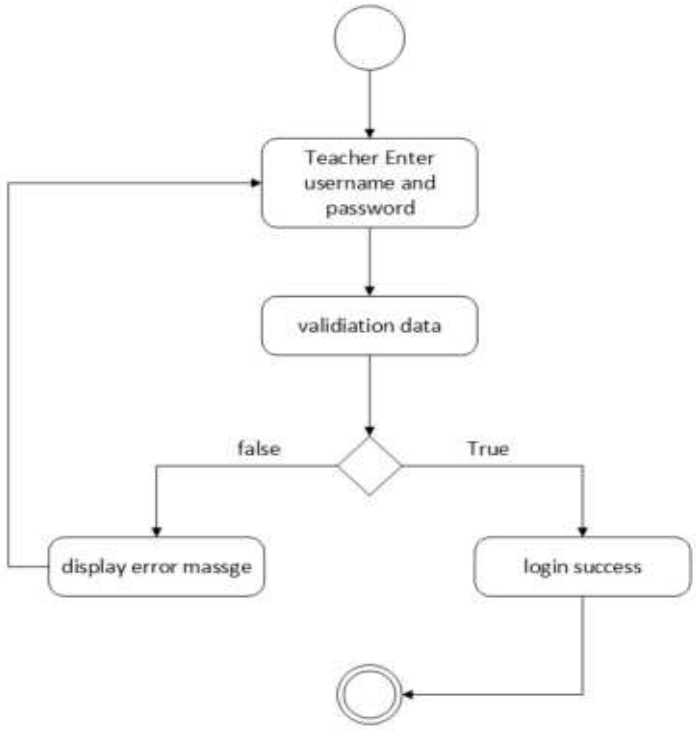


Figure 115. login Activity diagram

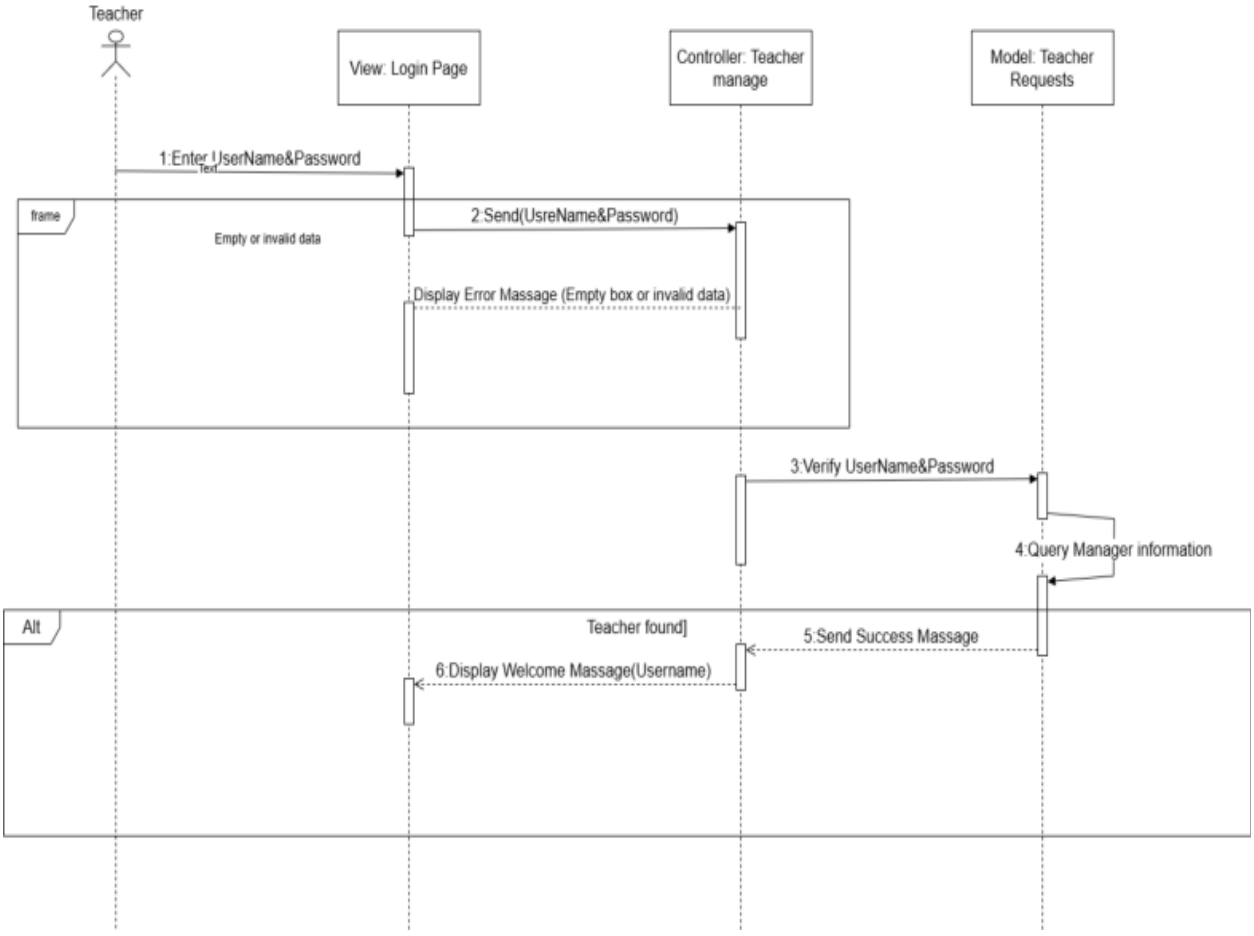


Figure 116. login Sequences diagram

52.Log out

ID	SCMS-52
Description	Log out
Actors	Teacher
Preconditions	The system should have a clear button or link to log out
Main path	1- Teacher click on logout bottom 2- System redirect Teacher to welcome page
Subsequent terms	The Teacher is blocked from accessing any system resources until he logs in again

Table 62. Use Case Specification (Log out)

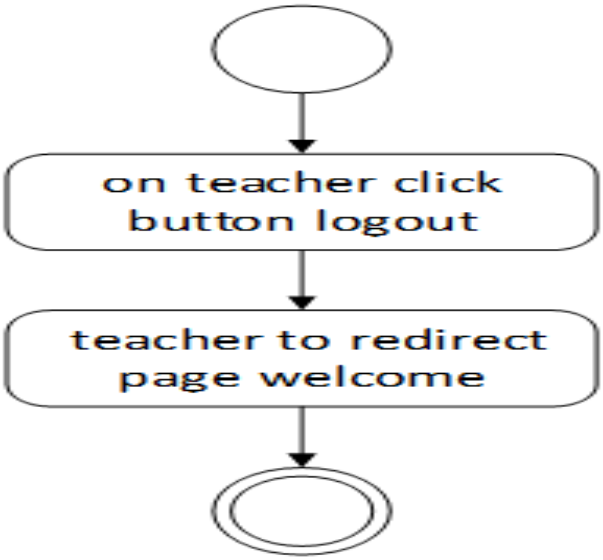


Figure 117. Log out Activity diagram

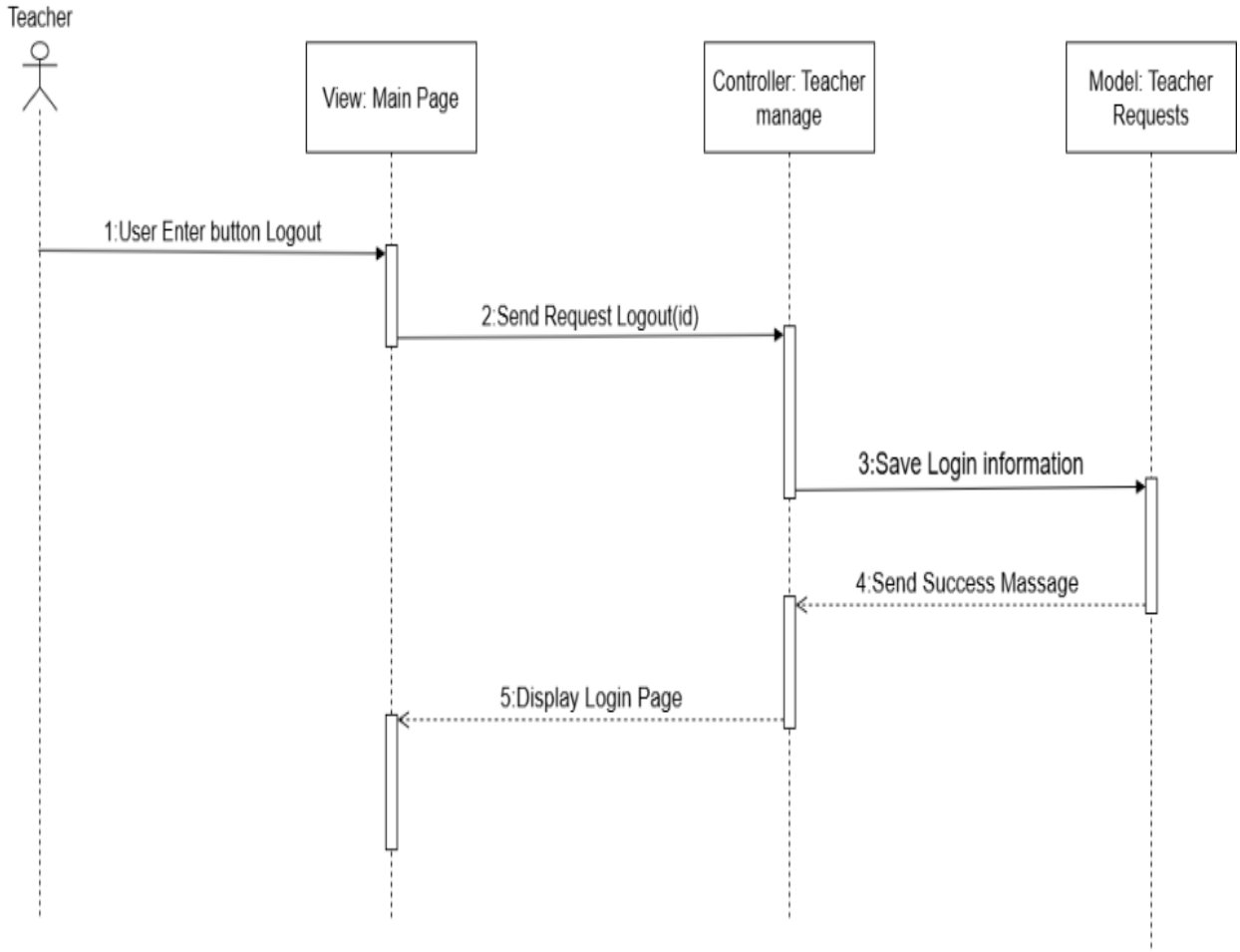


Figure 118. Log out Sequences diagram

53.View profile (information personal)

ID	SCMS-53
Description	View profile (information personal)
Actors	Teacher
Preconditions	• The Teacher must have an account in the system • The Teacher must log in to the system
Main path	1. Teacher click on My profile link 2. System get data from database and displays profile information
Subsequent terms	

Table 63. Use Case Specification (View profile (information personal))

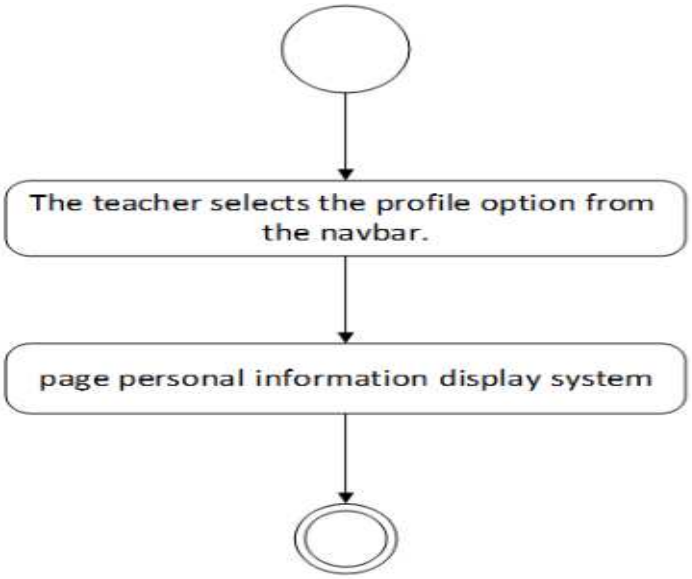


Figure 119. View profile (information personal) Activity diagram

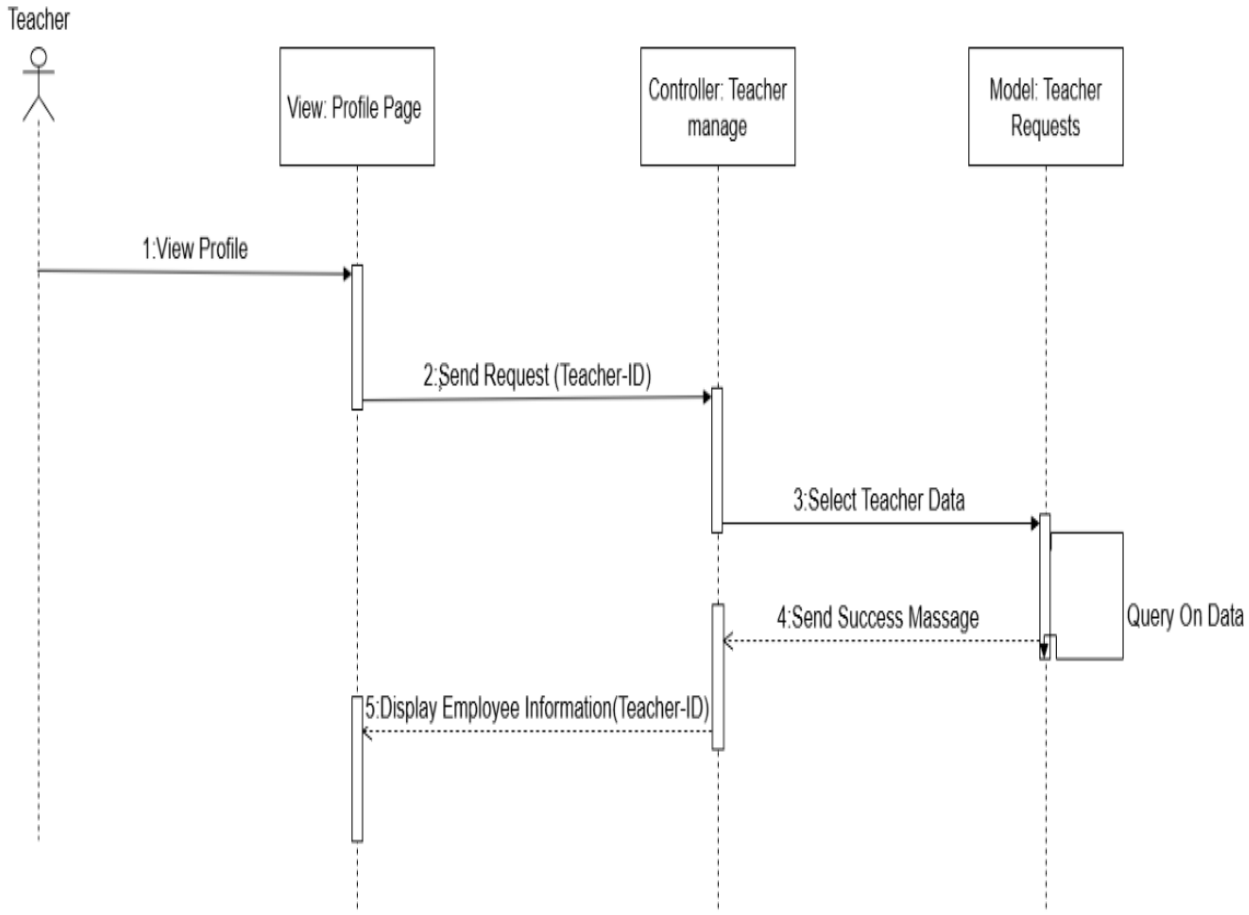


Figure 120. View profile (information personal) Sequences diagram

54.Edit profile (information personal)

ID	SCMS-54
Description	Edit profile (information personal)
Actors	Teacher
Preconditions	Teacher must have accounts in the system
Main path	1. Teacher click on Edit bottom in My profile page 2. System display Edit form and asks user to edits data 3. Student enter a new data 4. System validates a new data and show anew information
Subsequent terms	Update relevant information throughout the system
Alternate path	Teacher enter invalid data system display an error and go to step '3'

Table 64. Use Case Specification (Edit profile (information personal))

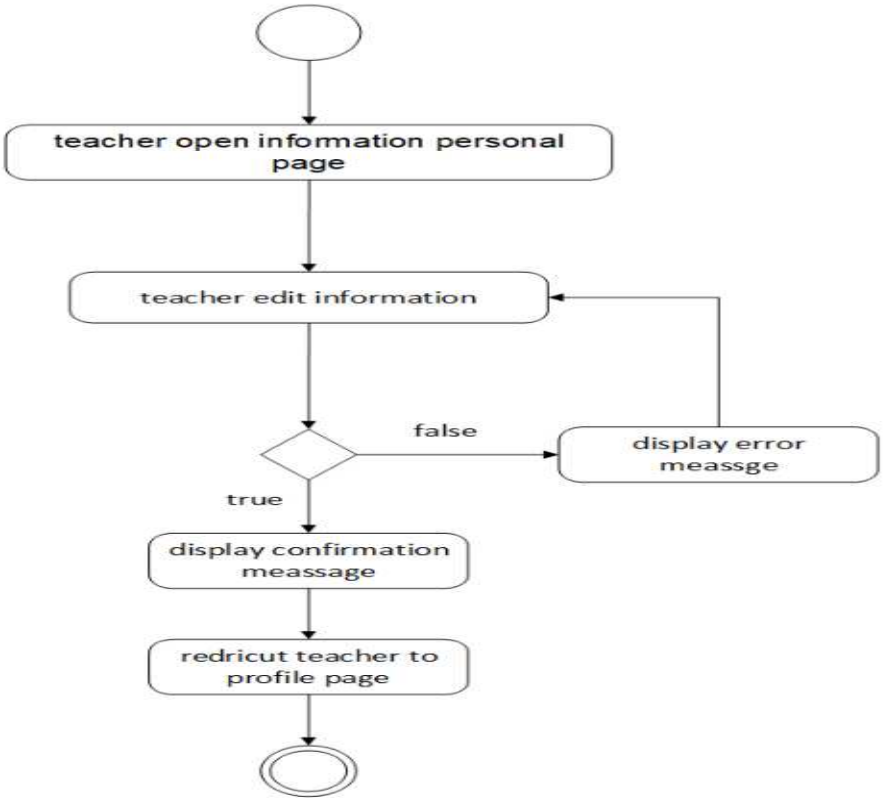


Figure 121. Edit profile (information personal) Activity diagram

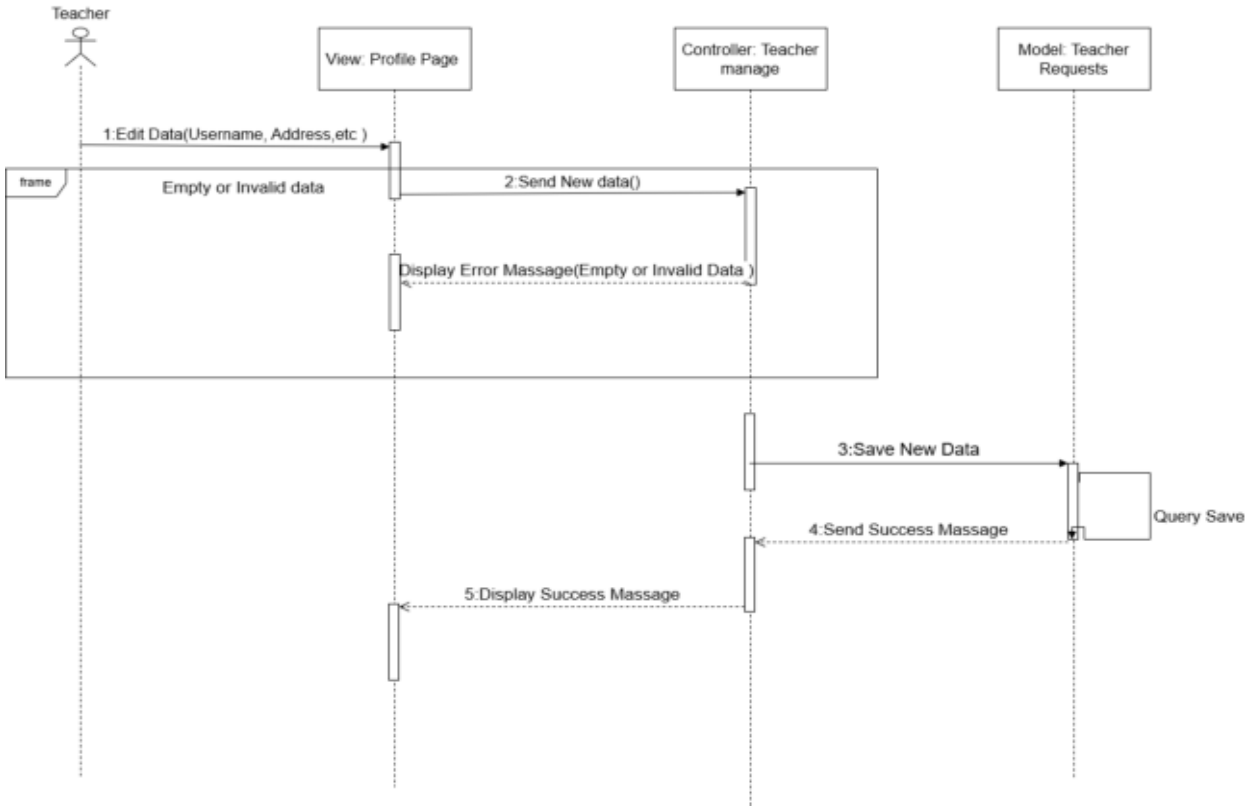


Figure 122. Edit profile (information personal) Sequences diagram

55.View Schedule

ID	SCMS-55
Description	View Schedule
Actors	Teacher
Preconditions	• The Teacher must have an account in the system • The Teacher must log in to the system
Main path	1. Teacher click on Schedule link 2. System get data from database and displays schedule information
Subsequent terms	

Table 65. Use Case Specification (View Schedule)

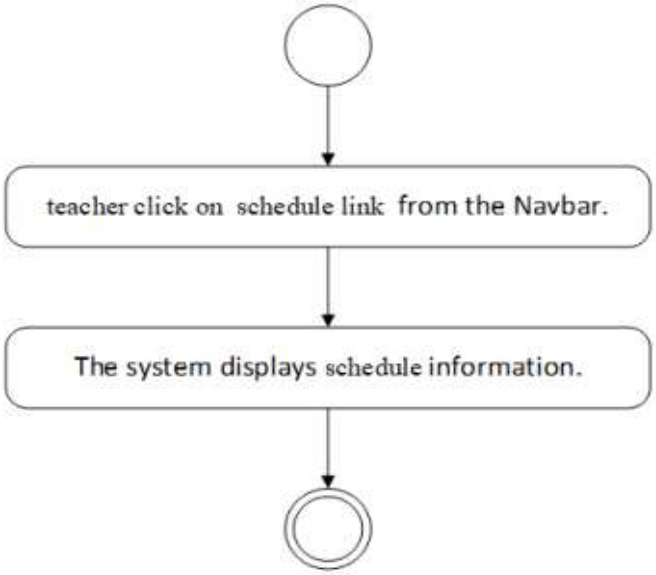


Figure 123. View Schedule Activity diagram

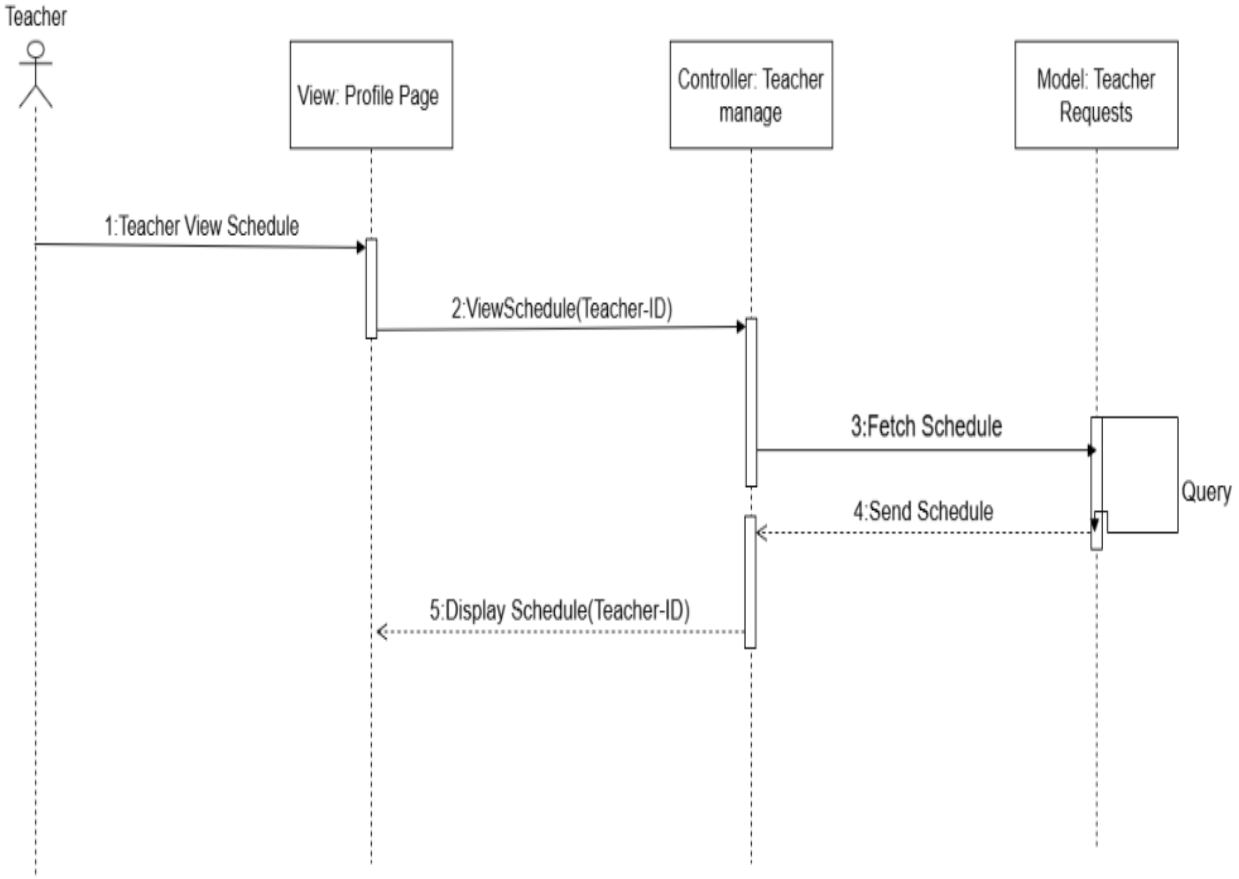


Figure 124. View Schedule Sequences diagram

56. Presence and absence

ID	SCMS-56
Description	Presence and absence
Actors	Teacher
Preconditions	• The Teacher must have an account in the system • The Teacher must log in to the system
Main path	1. Teacher click on Schedule link 2. The system displays the class schedule and below each class there is a button to register attendance. 3. The system displays the students in the class, and next to each student are the attendance and absence buttons. 4. The system sets attendance and absence for the class and clicks Save.
Subsequent terms	Attendance may only be taken on the day of the class.

Table 66. Use Case Specification (Presence and absence)

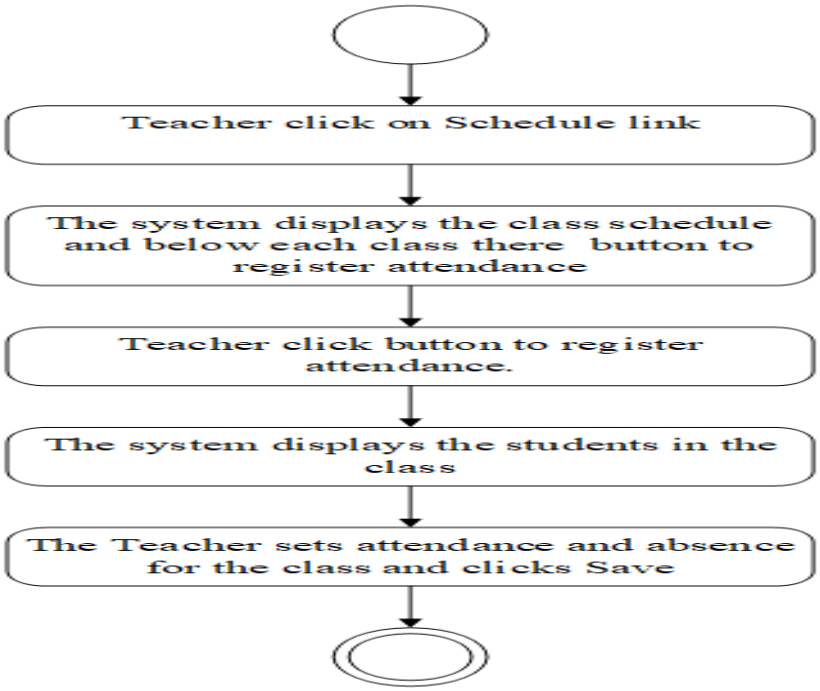


Figure 125. Presence and absence Activity diagram

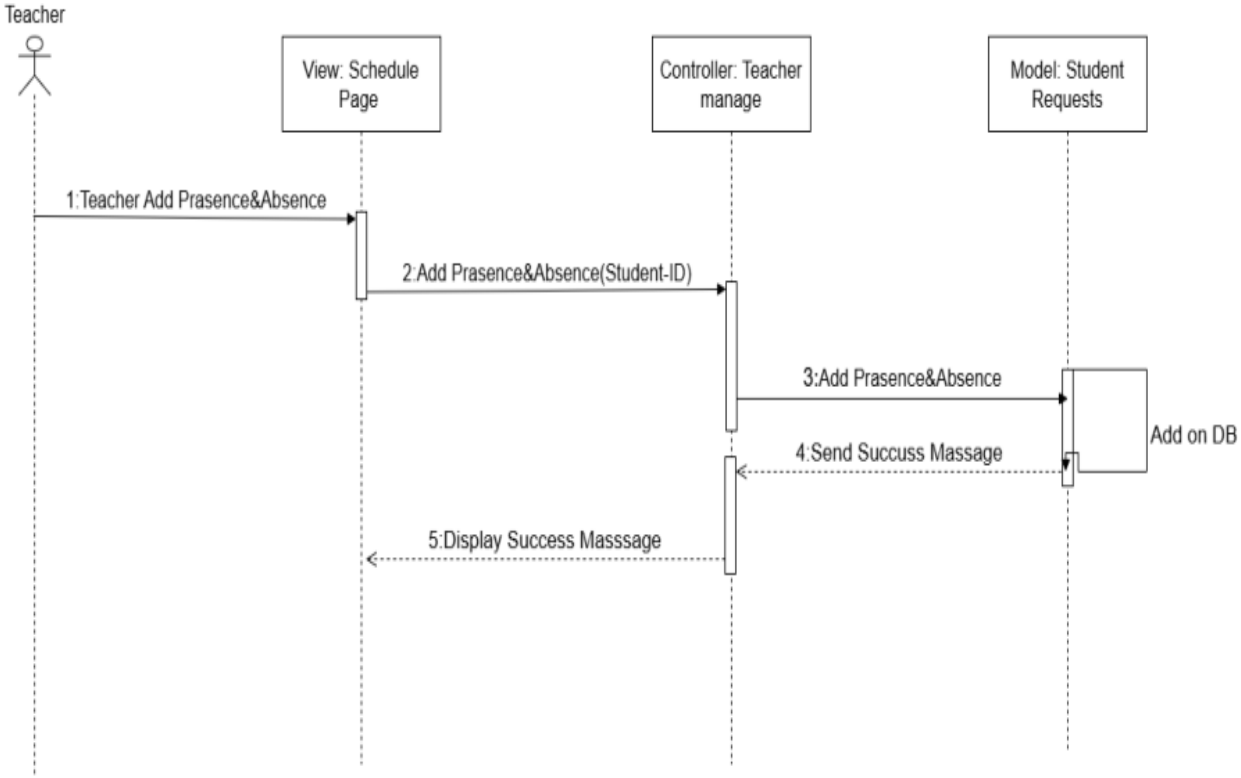


Figure 126. Presence and absence Sequences diagram

57.Presence and absence

ID	SCMS-57
Description	Presence and absence
Actors	Teacher
Preconditions	• The Teacher must have an account in the system • The Teacher must log in to the system
Main path	1. Teacher click on Schedule link 2. The system displays the class schedule and below each class there is a button to register attendance. 3. The system displays the students in the class, and next to each student are the attendance and absence buttons. 4. The system sets attendance and absence for the class and clicks Save.
Subsequent terms	

Table 67. Use Case Specification (Presence and absence)

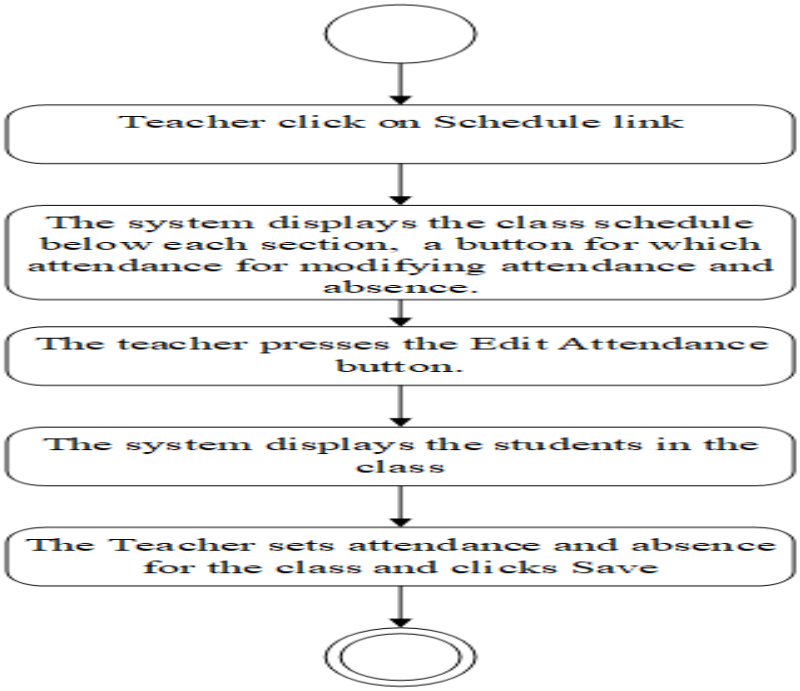


Figure 127. Presence and absence Activity diagram

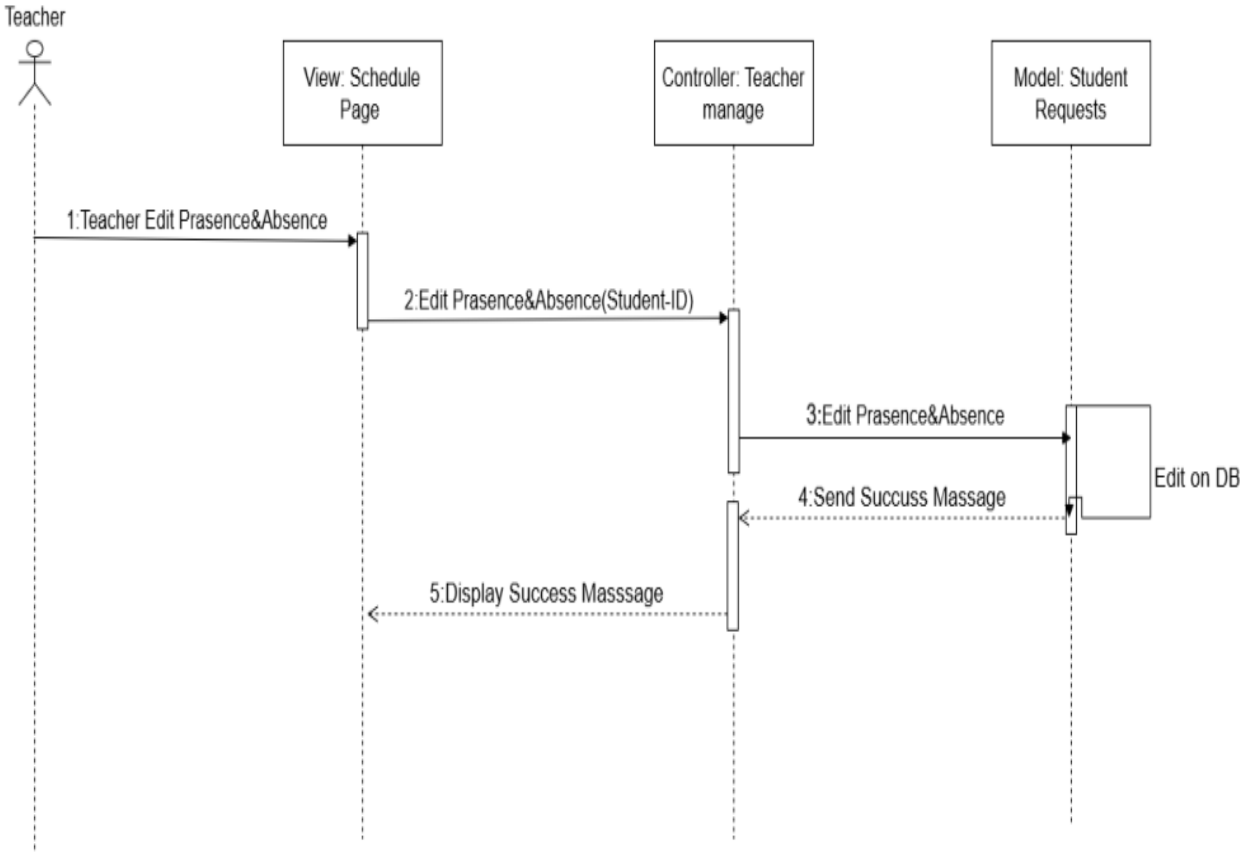


Figure 128. Presence and absence Sequences diagram

58.Add school assignments

ID	SCMS-58
Description	Add school assignments
Actors	Teacher
Preconditions	• The Teacher must have an account in the system • The Teacher must log in to the system
Main path	1. Teacher click on Schedule link 2. The system displays the class schedule below each section, and a button to add homework. 3. The teacher sets the homework for the specific section.
Subsequent terms	

Table 68. Use Case Specification (Add school assignments)

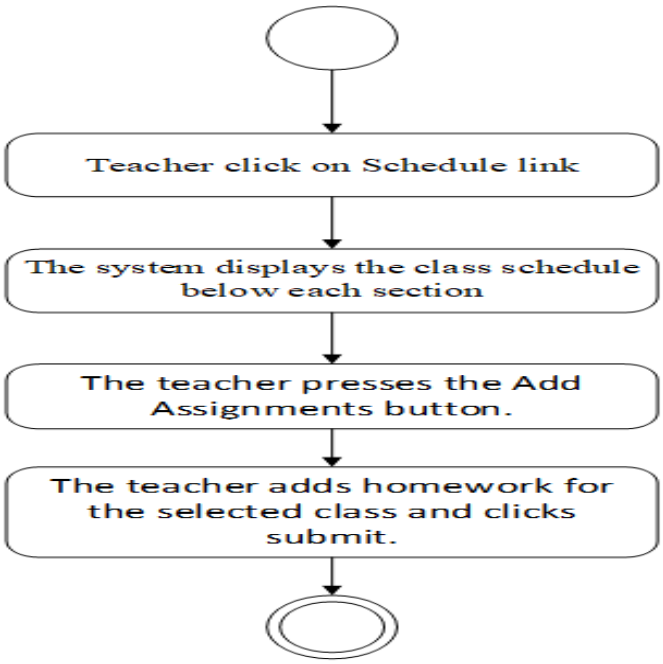


Figure 129. Add school assignments Activity diagram

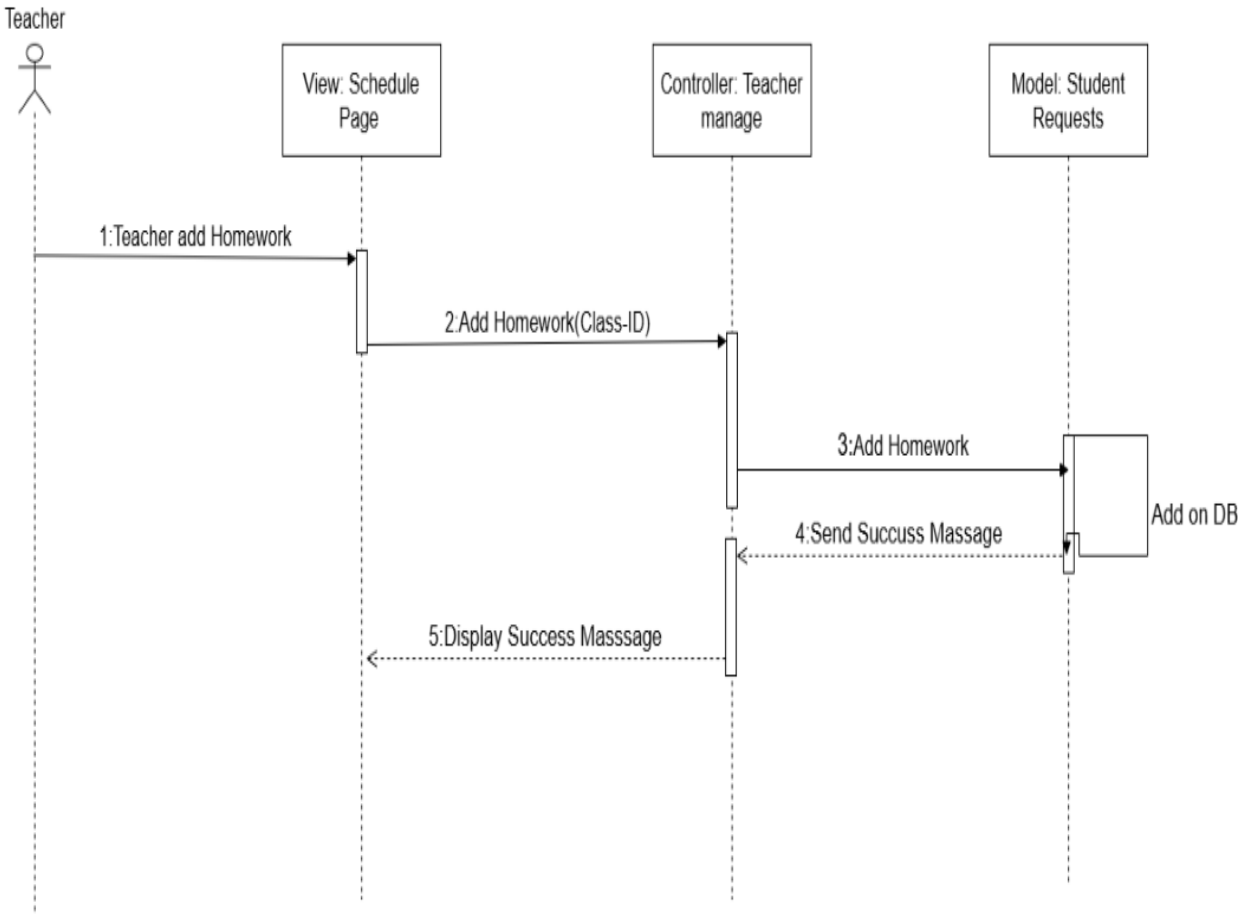


Figure 130. Add school assignments Sequences diagram

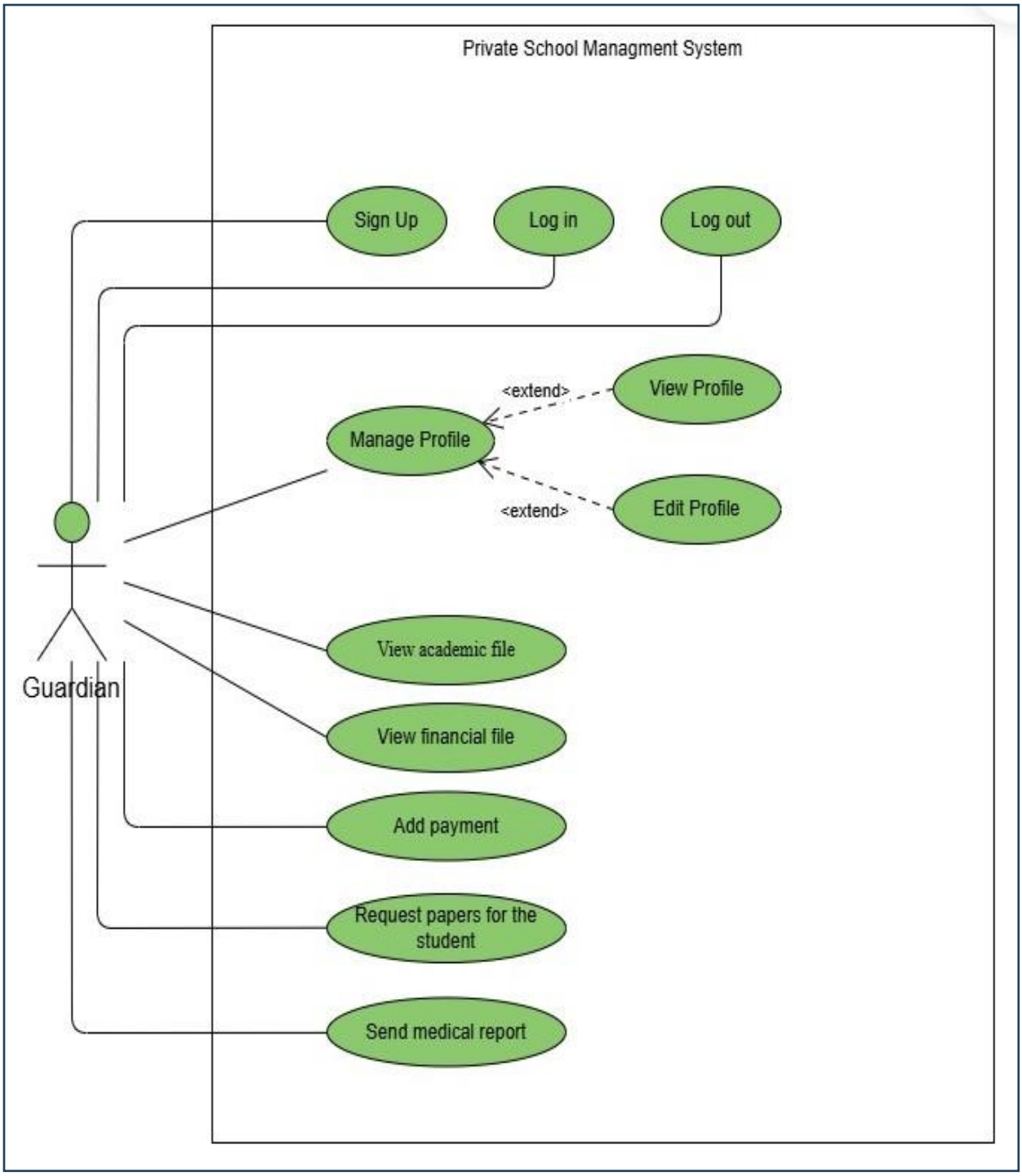


Figure 131. UseCase low level Guardian

61. Sign Up

ID	SCMS-61
Description	Sign Up
Actors	Guardian
Preconditions	• The guardian must have the student's ID • The system must be available and accessible
Main path	1. The Guardian provides the information to the system 2. The system verifies the validity of the information in the database 3. If the information is correct, the account registration will be successful
Subsequent terms	Redirecting the user to his home page
Alternate path	1. If the information is incorrect, the system sends an error message and directs the user to enter the correct information

Table 69. Use Case Specification (Sign Up)

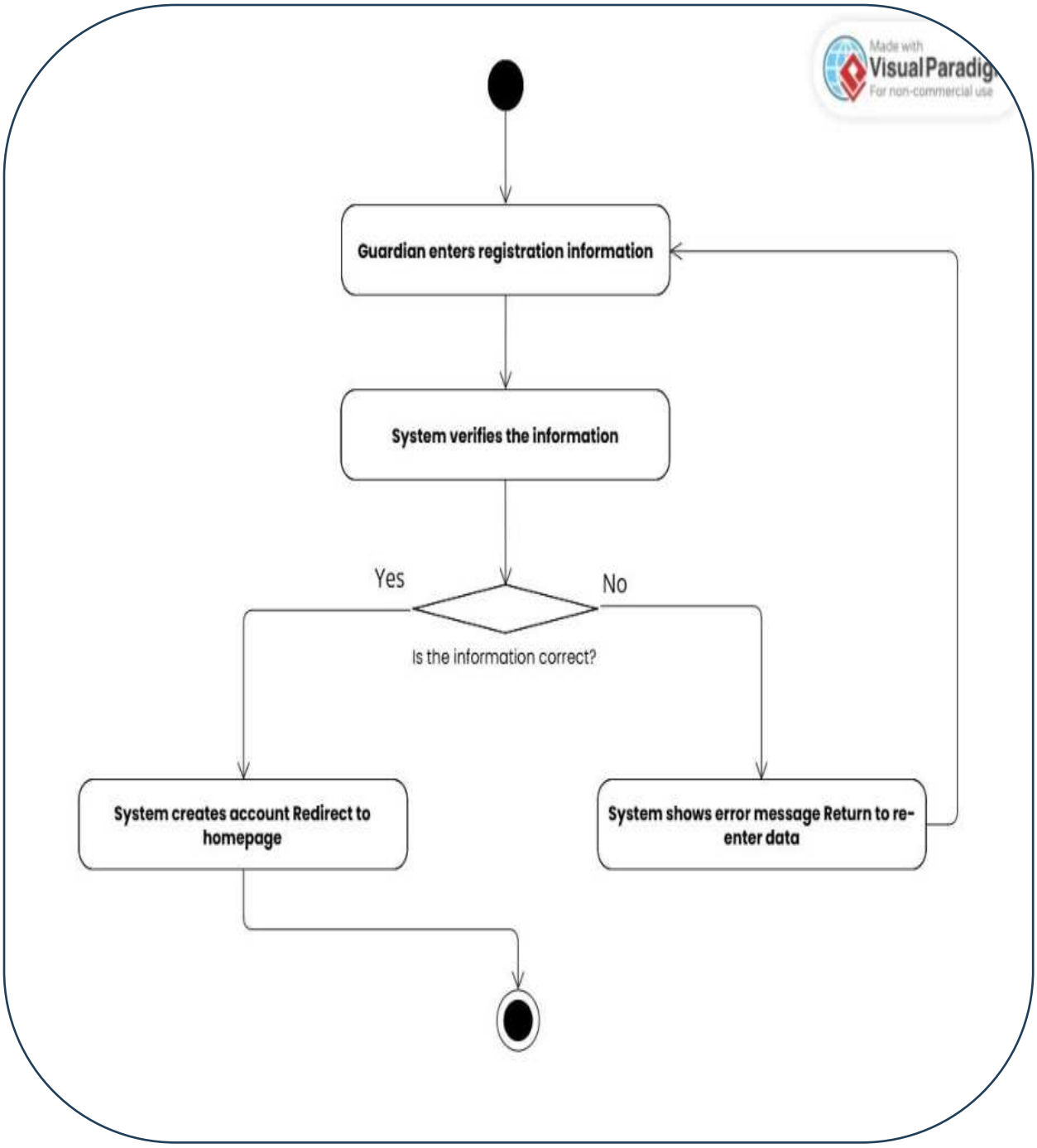


Figure 132. Sign Up Activity diagram

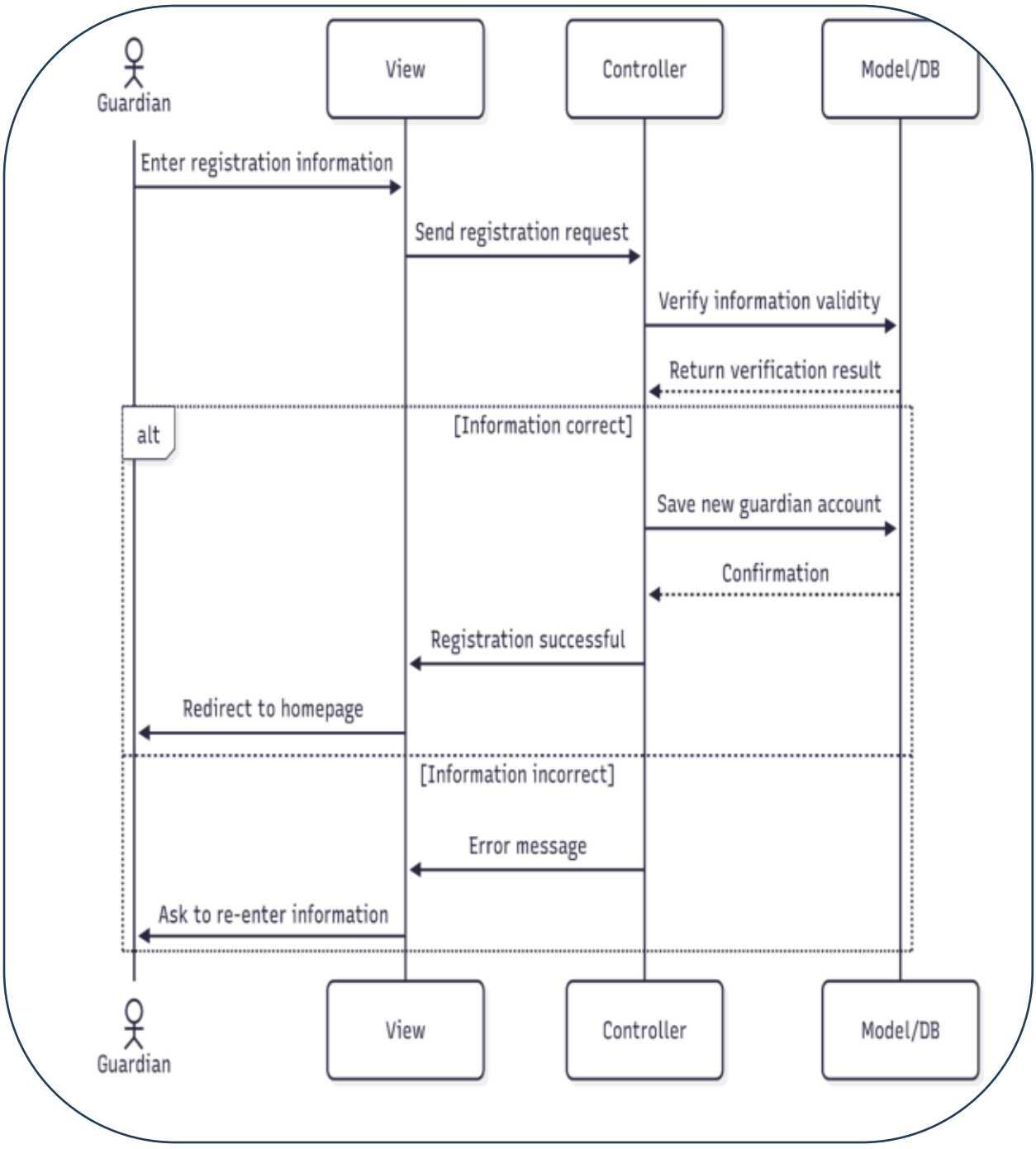


Figure 133. Sign Up Sequences diagram

62. Log in

ID	SCMS-62
Description	login
Actors	Guardian
Preconditions	• The guardian must have an account in the system • The guardian must have a valid username and password • The system must be available and accessible
Main path	1. The guardian provides the User name and password to the system 2. The system verifies the validity of the User name and password in the database 3. If the information is correct, the system logs in successfully
Subsequent terms	Redirecting the user to his home page
Alternate path	1. If the information is incorrect, the system sends an error message and directs the user to enter the User name and password again.

Table 70. Use Case Specification (login)

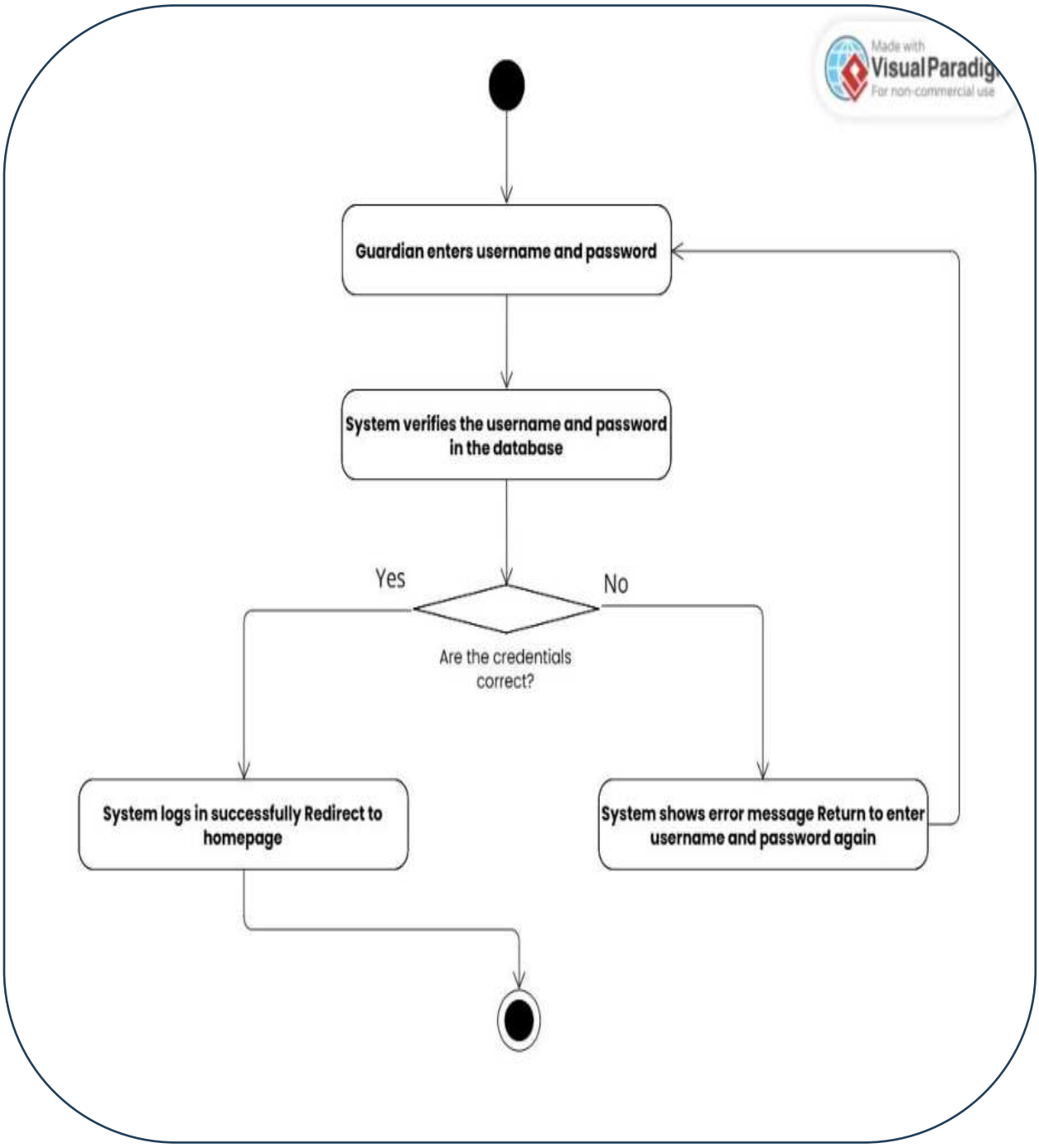


Figure 134. login Activity diagram

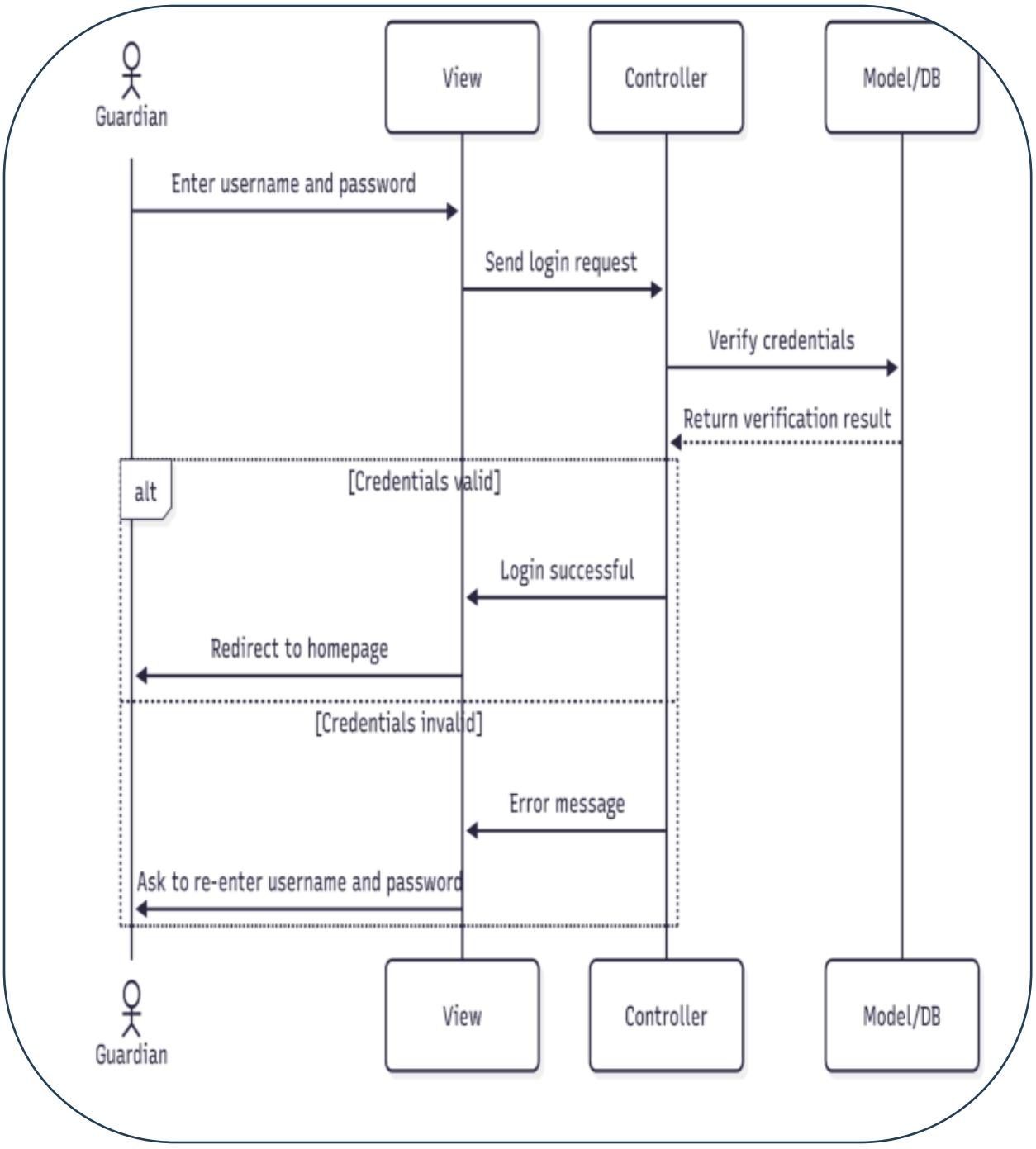


Figure 135. login Sequences diagram

63. View personal information

ID	SCMS-63
Description	View personal information
Actors	Guardian
Preconditions	• The Guardian must have an account in the system • The Guardian must log in to the system
Main path	1- Guardian click on My profile link 2- System get data from database and displays profile information
Subsequent terms	

Table 71. Use Case Specification (View personal information)

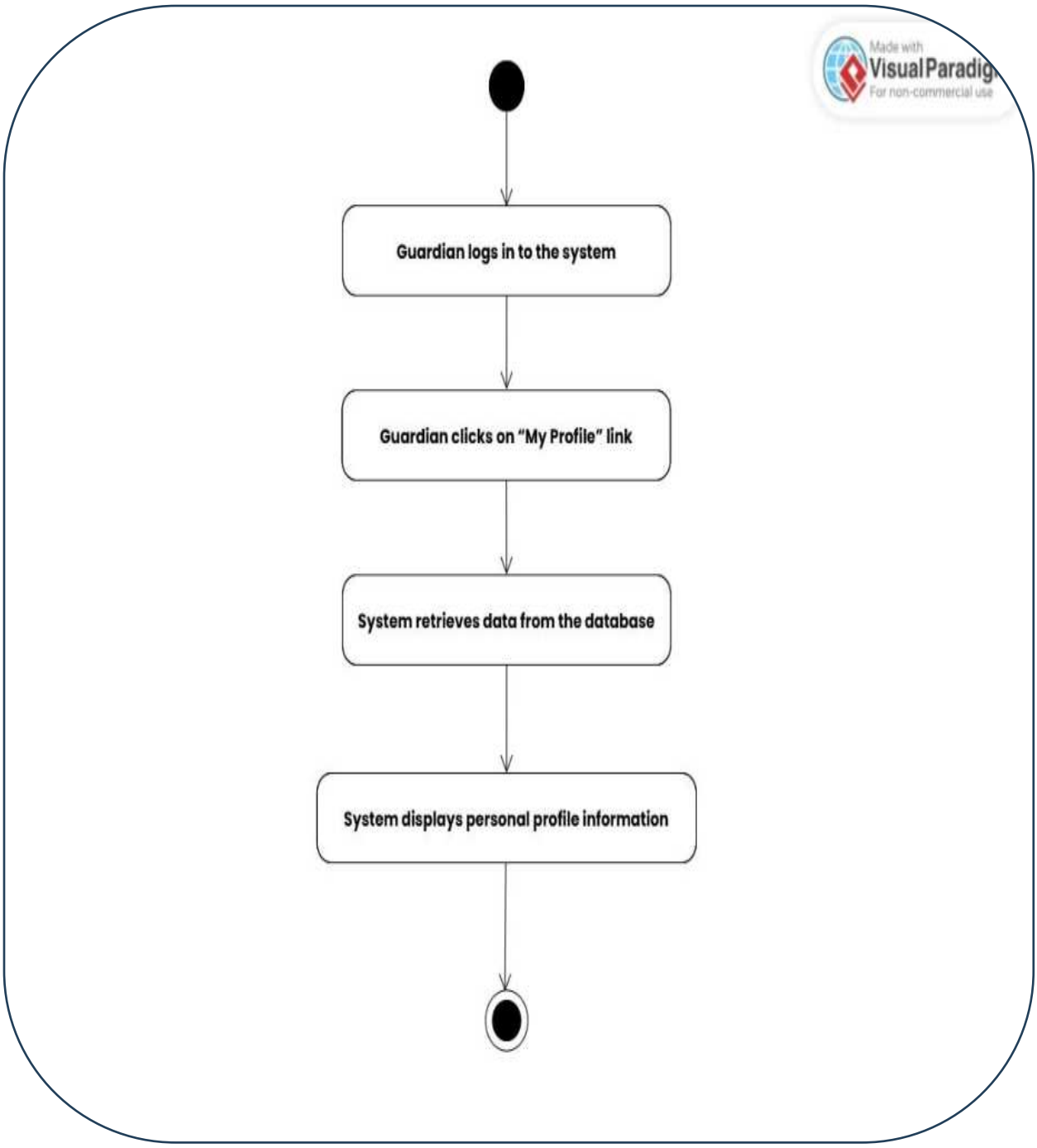


Figure 136. View personal information Activity diagram

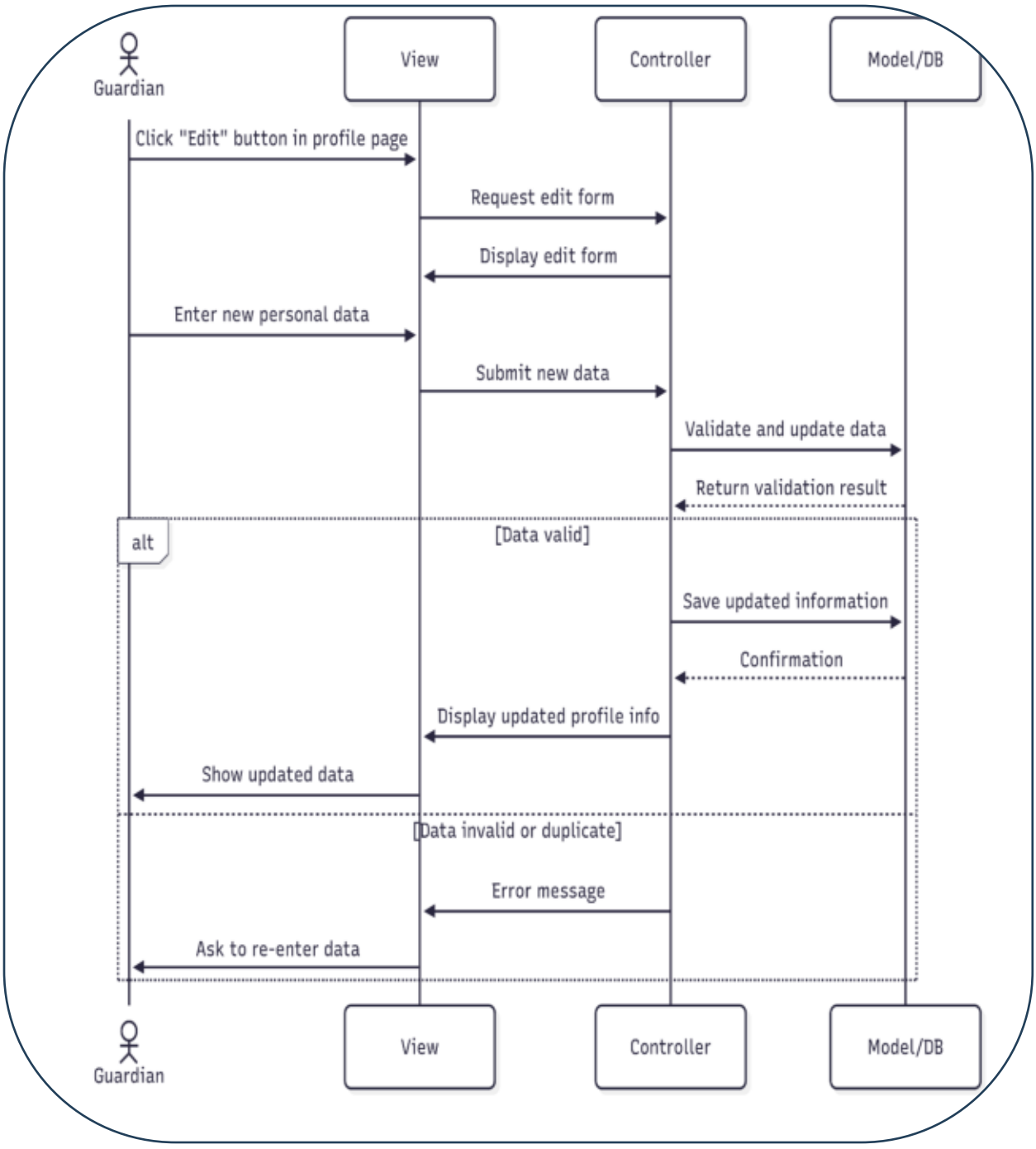


Figure 137. View personal information Sequences diagram

64. Edit personal information

ID	SCMS-64
Description	Edit personal information
Actors	Guardian
Preconditions	Guardian must have accounts in the system
Main path	1. Guardian click on Edit bottom in My profile page 2. System display Edit form and asks user to edits data 3. Guardian enter a new data 4. System validates a new data and shows anew information
Subsequent terms	Update relevant information throughout the system
Alternate path	Guardian enter invalid data -or duplicate phone number and system display an error and go to step '3'

Table 72. Use Case Specification (Edit personal information)

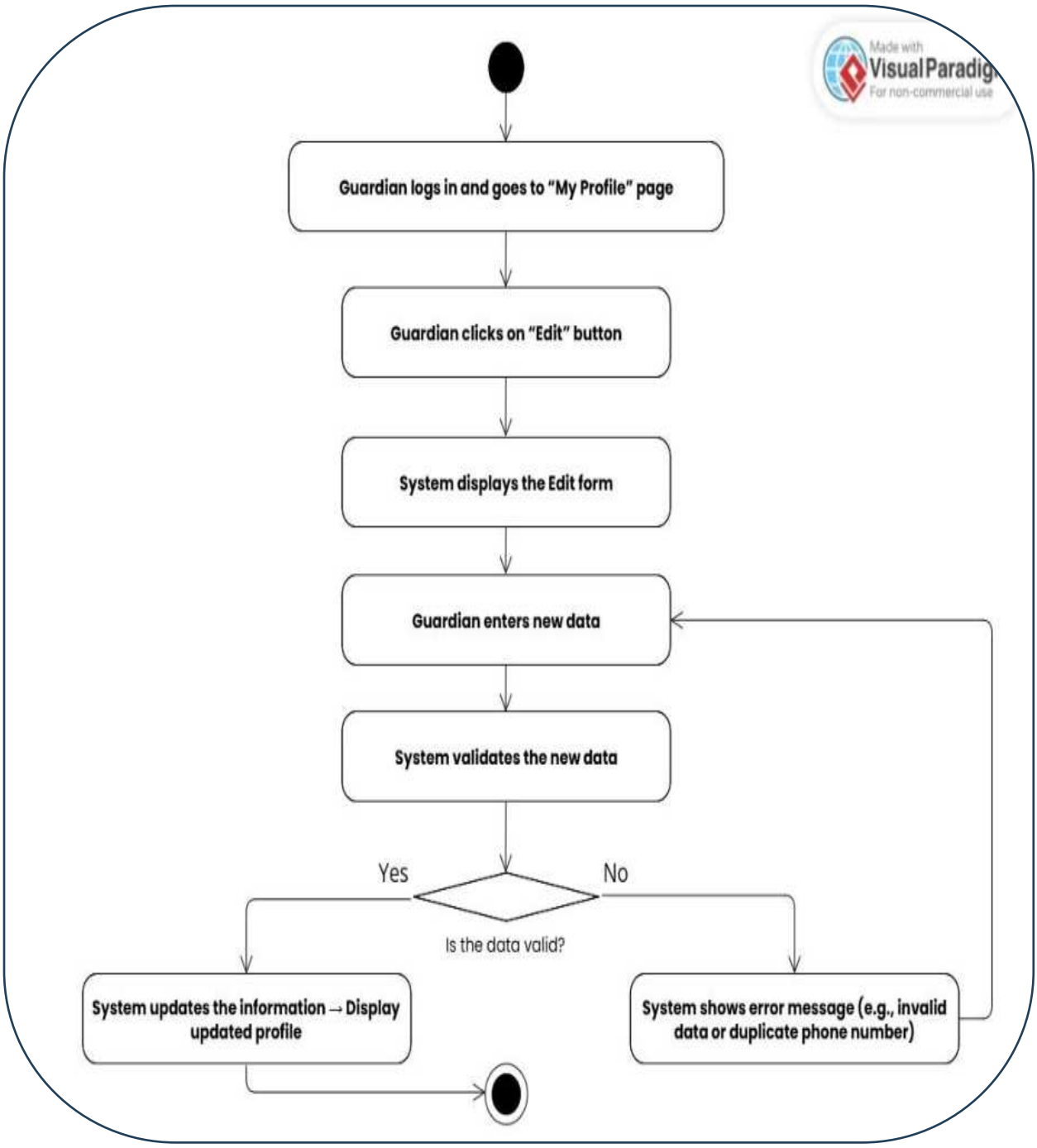


Figure 138. Edit personal information Activity diagram

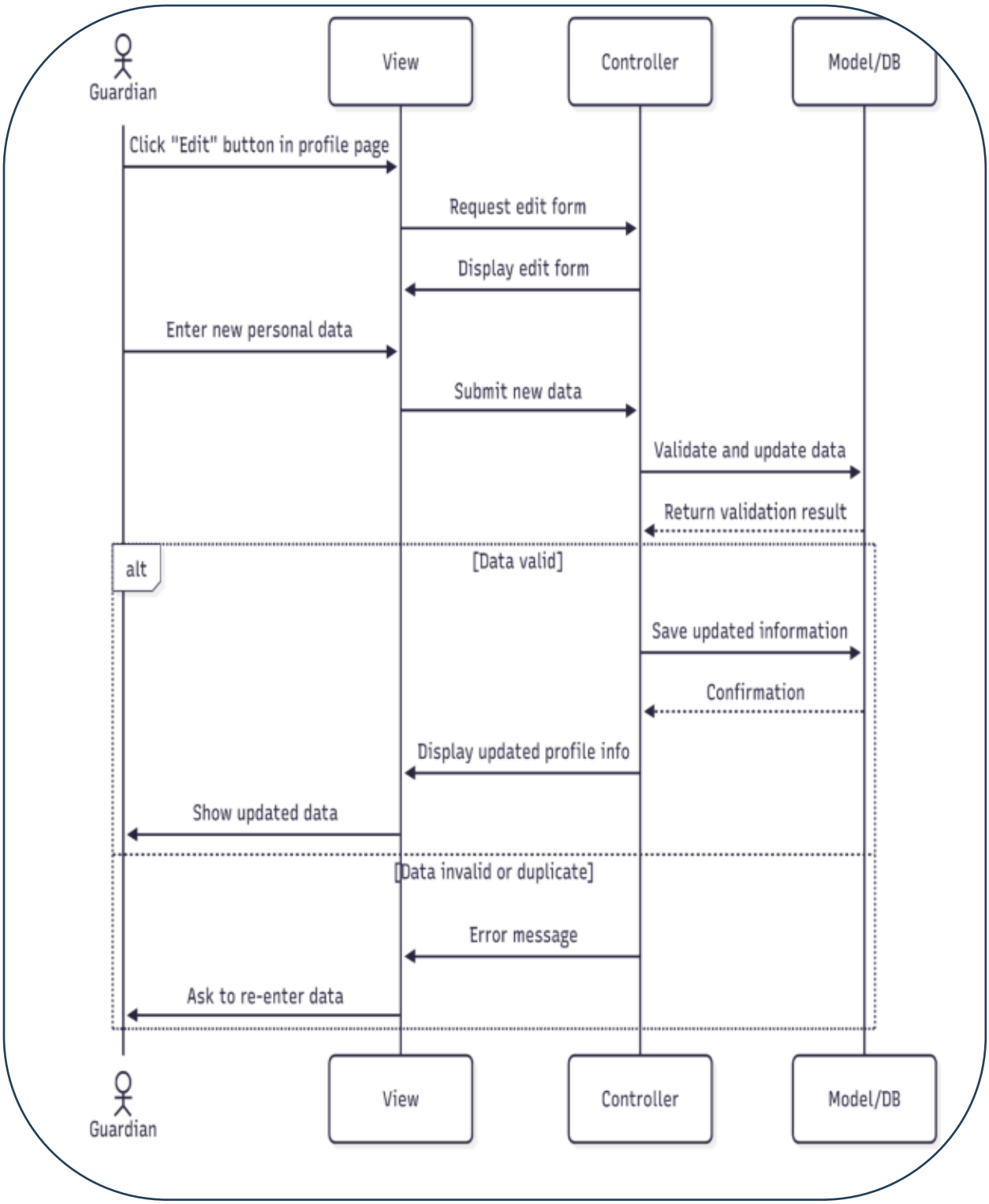


Figure 139. Edit personal information Sequences diagram

65. Log out

ID	SCMS-65
Description	Log out
Actors	Guardian
Preconditions	The system should have a clear button or link to log out
Main path	1- Guardian click on logout bottom 2- System displays a massage and asked Guardian to conform the process 3- Guardian conform the process 4- System redirect Guardian to login page
Subsequent terms	The Guardian is blocked from accessing any system resources until he logs in again

Table 73. Use Case Specification (Log out)

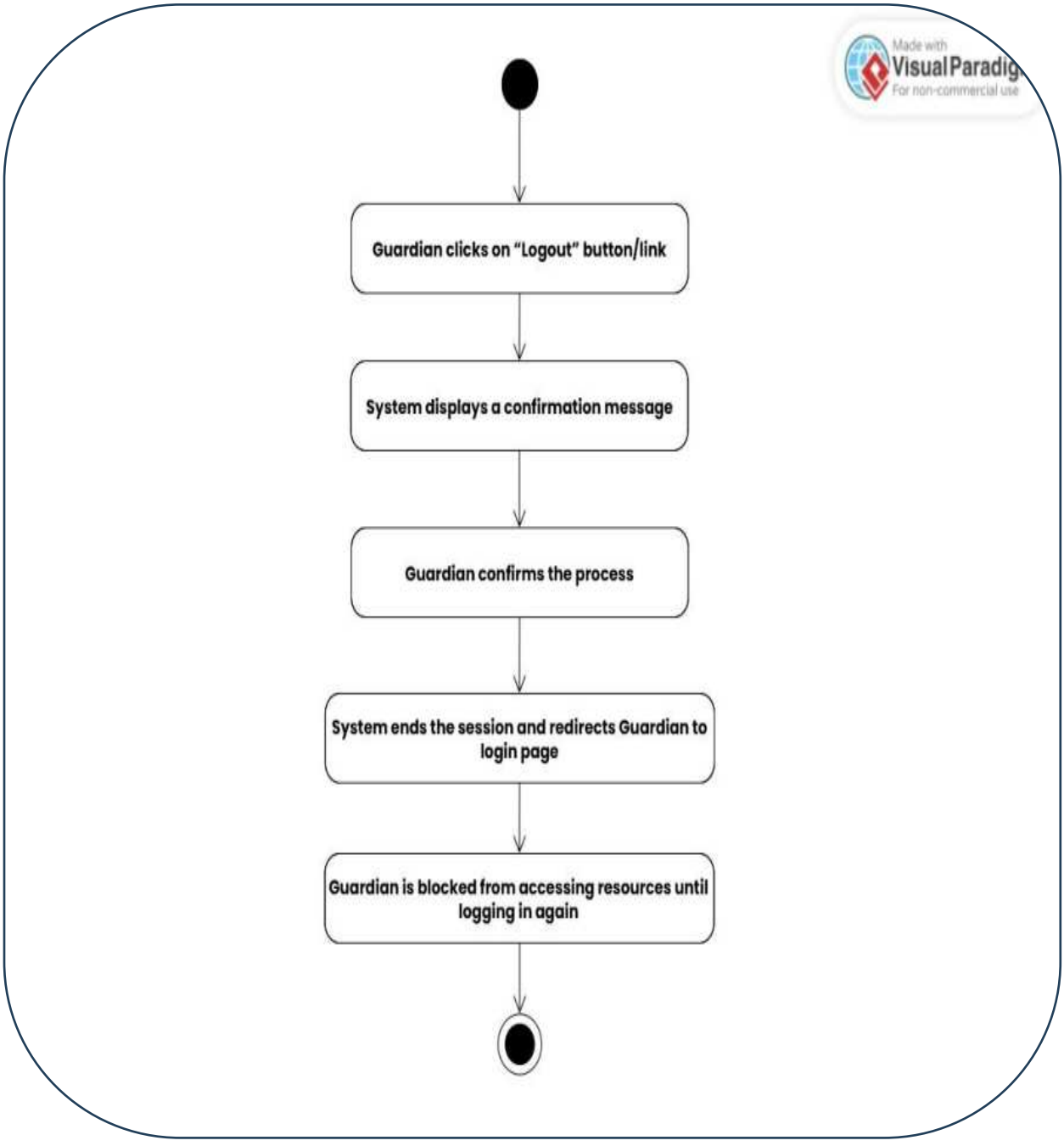


Figure 140. Log out Activity diagram

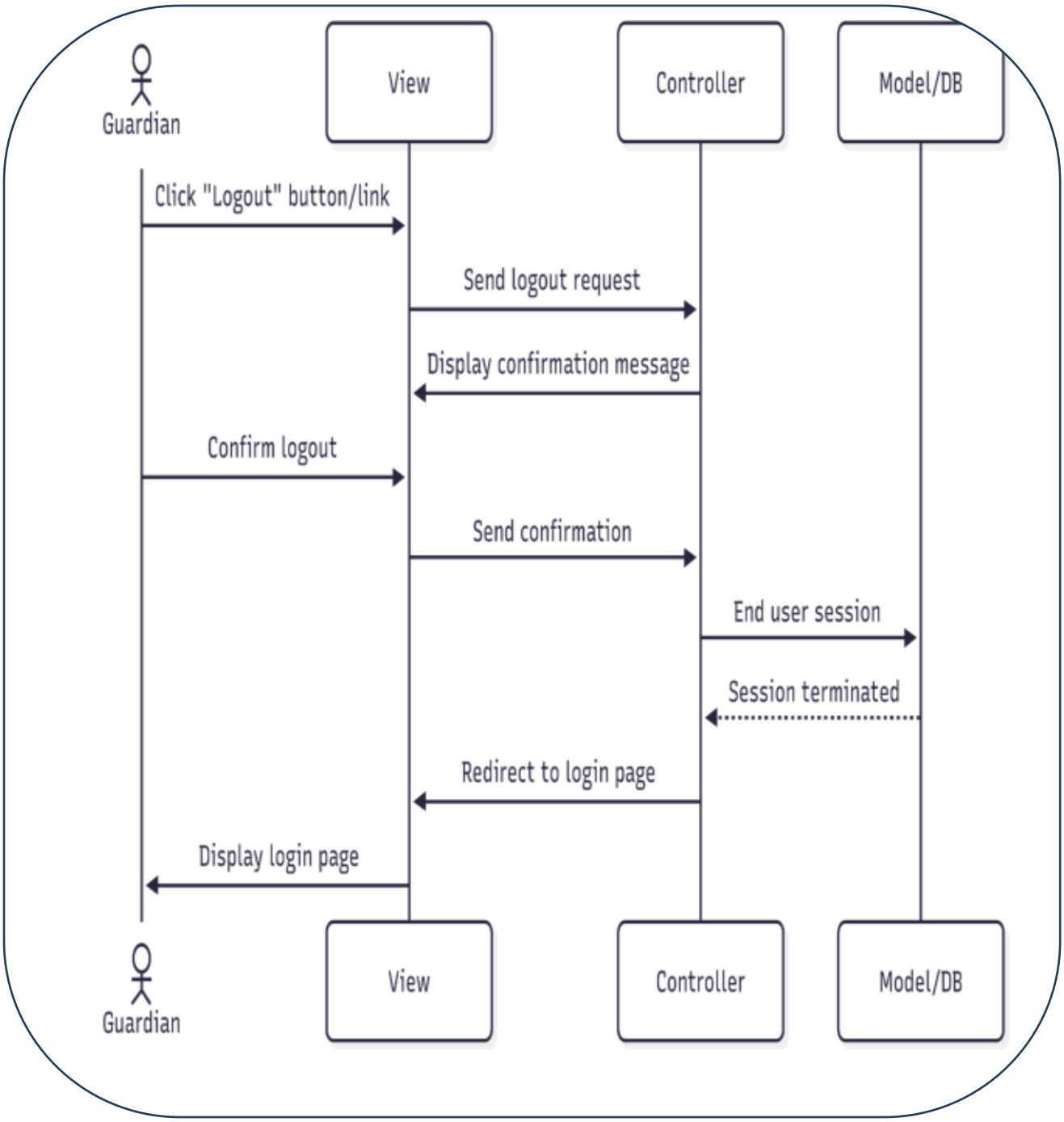


Figure 141. Log out Sequences diagram

66. View Academic file

ID	SCMS-66
Description	View Academic file
Actors	Guardian
Preconditions	The Guardian must have a valid and active account in the system
Main path	1. The Guardian logs into the system. 2. The Guardian selects **"Academic File"** from the menu. 3. The system displays a list of students linked to the Guardian (if more than one child). 4. The Guardian chooses the desired student. 5. The system retrieves the following data from the database: • Subjects assigned to the student. • Grades for exams, quizzes, and activities. • Attendance and absence records.
Subsequent terms	The system displays the complete academic file of the selected student
Alternate path	• If grades are not yet entered, the system displays the message: "Grades are not available at the moment." • If the Guardian has more than one student, the system provides a student selection option.

Table 74. Use Case Specification (View Academic file)

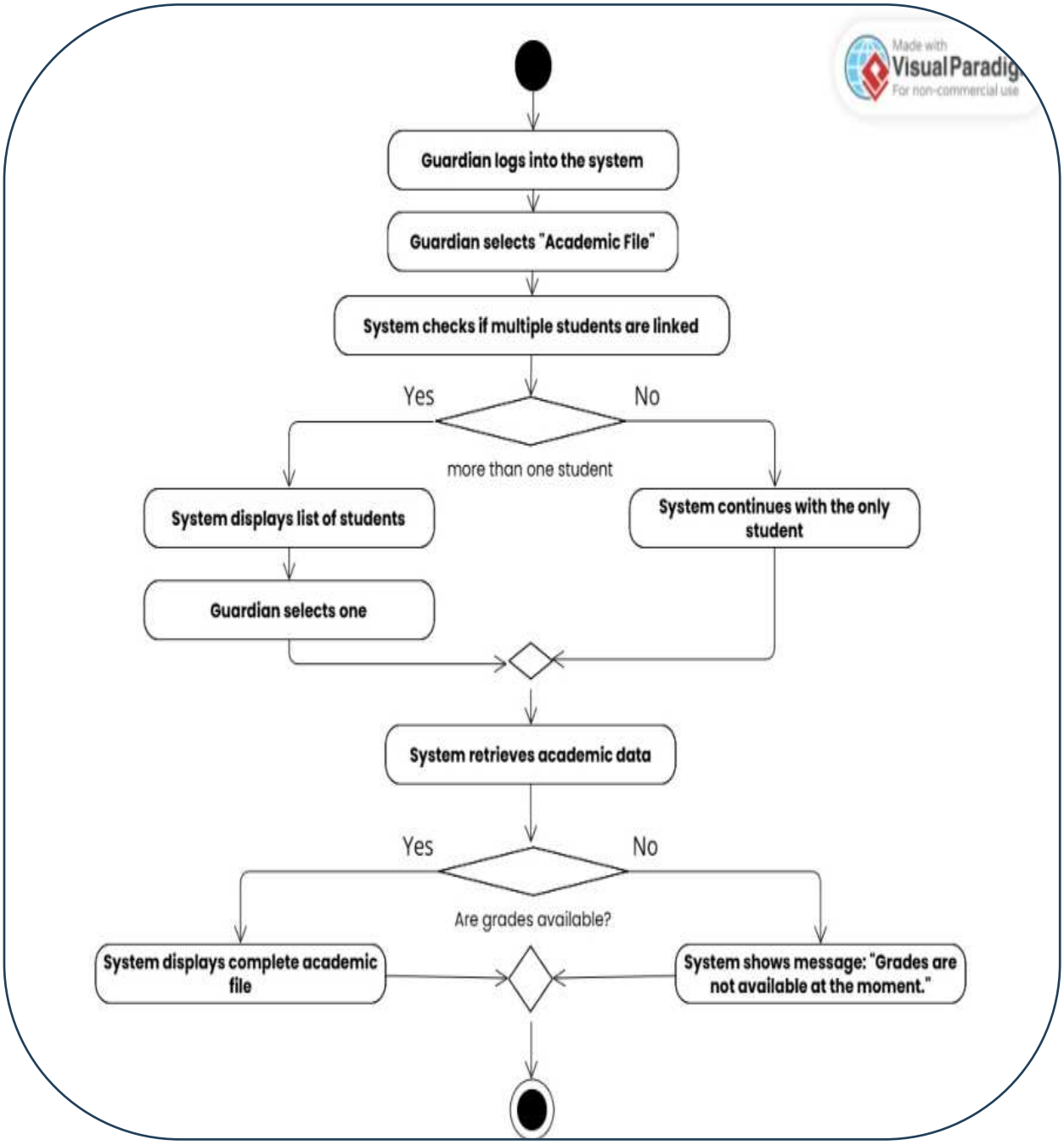


Figure 142. View Academic file Activity diagram

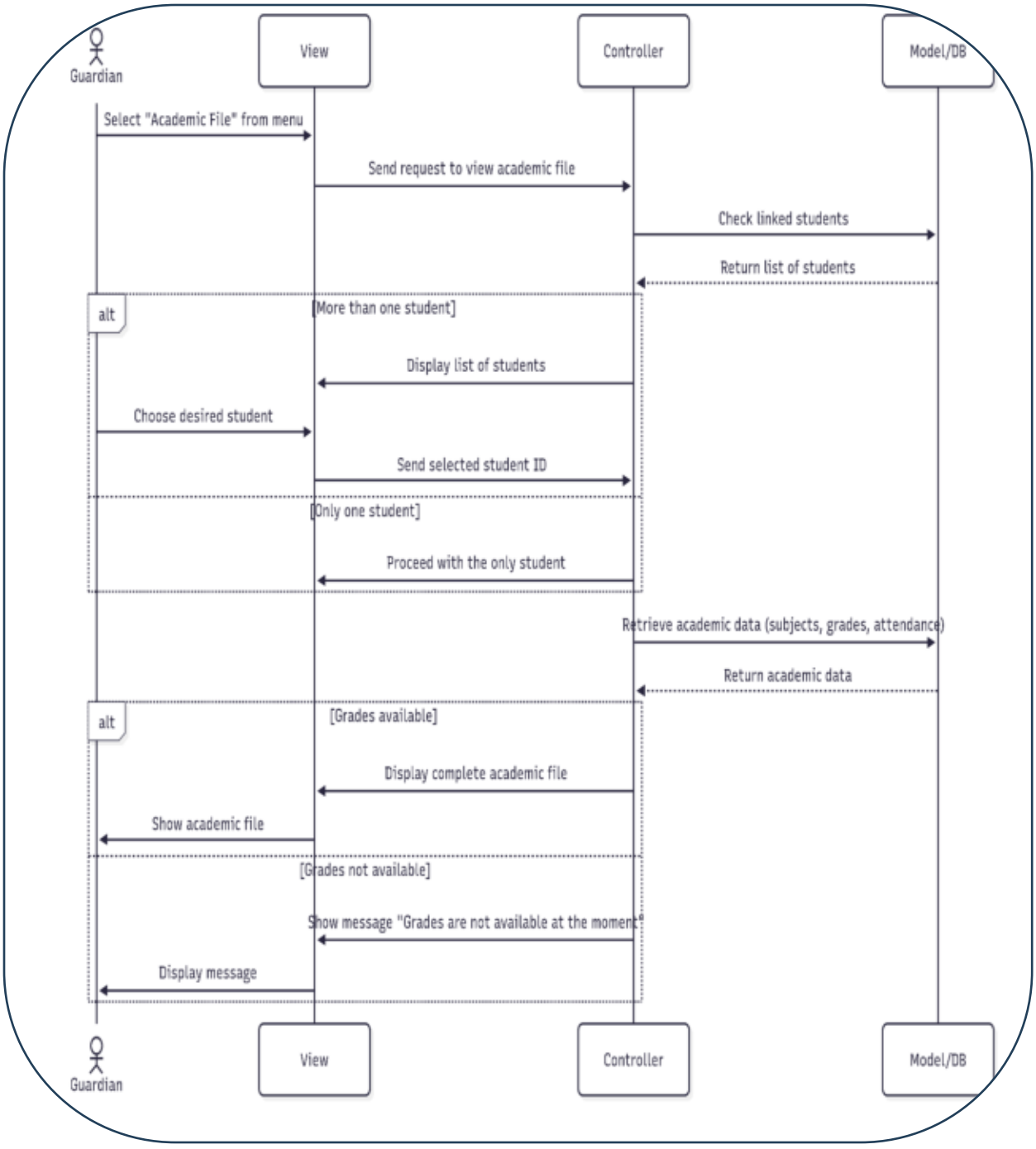


Figure 143. View Academic file Sequences diagram

67. View financial file

ID	SCMS-67
Description	View financial file
Actors	Guardian
Preconditions	• The Guardian has a valid and active account in the system. • Financial data (payments, due dates) has been entered by the school's finance department.

Main path	1. The Guardian logs into the system.
	2. The Guardian selects **"Financial File"** from the menu.
	3. The system displays a list of students linked to the Guardian account (if applicable).
	4. The Guardian selects the desired student.
	5. The system retrieves from the database:
	  • Tuition fees and installments.
	  • Payments made (with dates and amounts).
	  • Outstanding balances or overdue payments.

Subsequent terms	The system displays the student's full financial record
Alternate path	• If no payments have been made, the system displays "No payment records available." • If there are overdue balances, the system highlights them and may display a reminder message.

Table 75. Use Case Specification (View financial file)

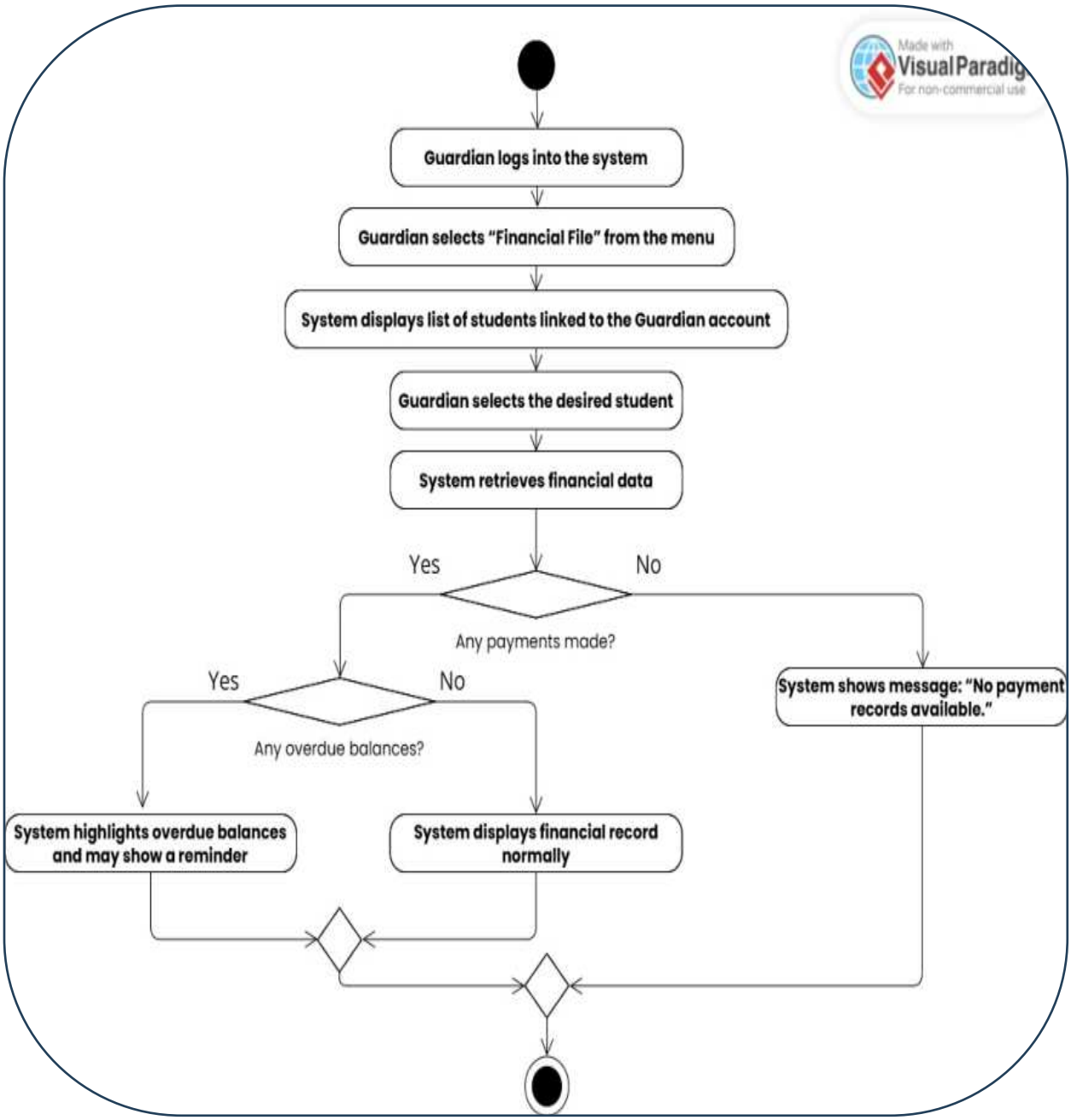


Figure 144. View financial file Activity diagram

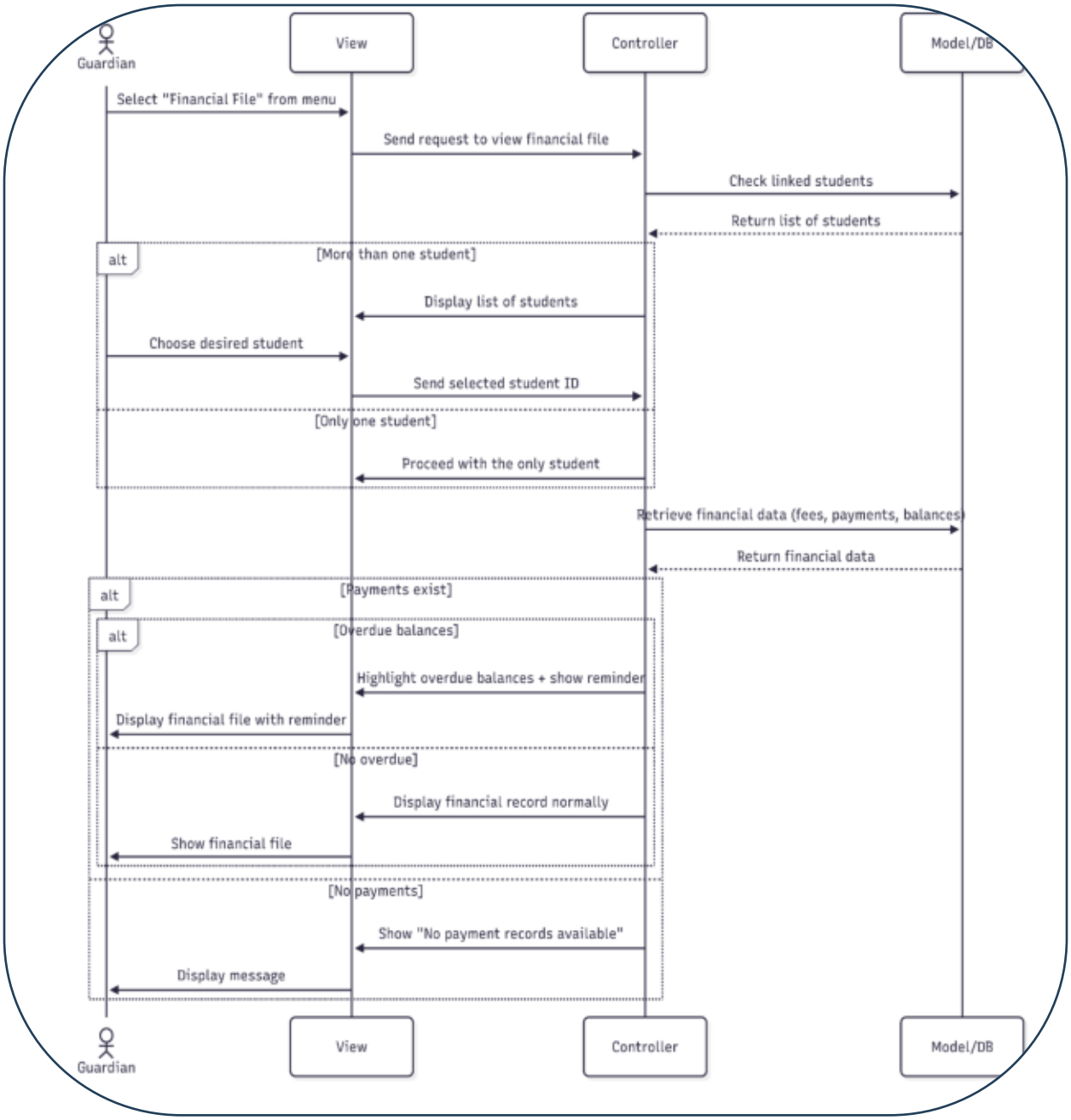


Figure 145. View financial file Sequences diagram

3.4.3. Entity Relation Diagram

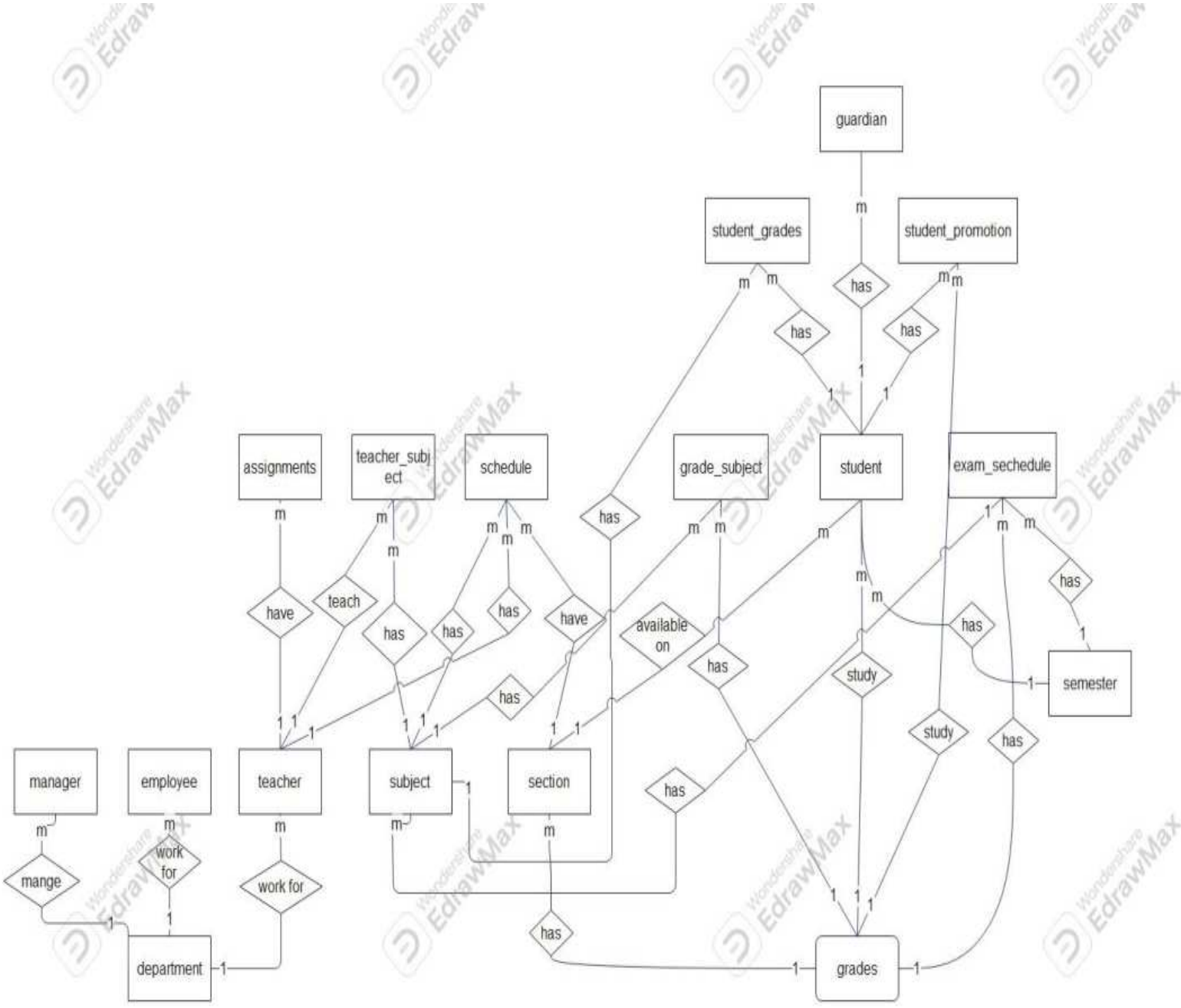


Figure 146. Entity Relation Diagram

4: DESIGN STUDY

4.1. Class Diagram

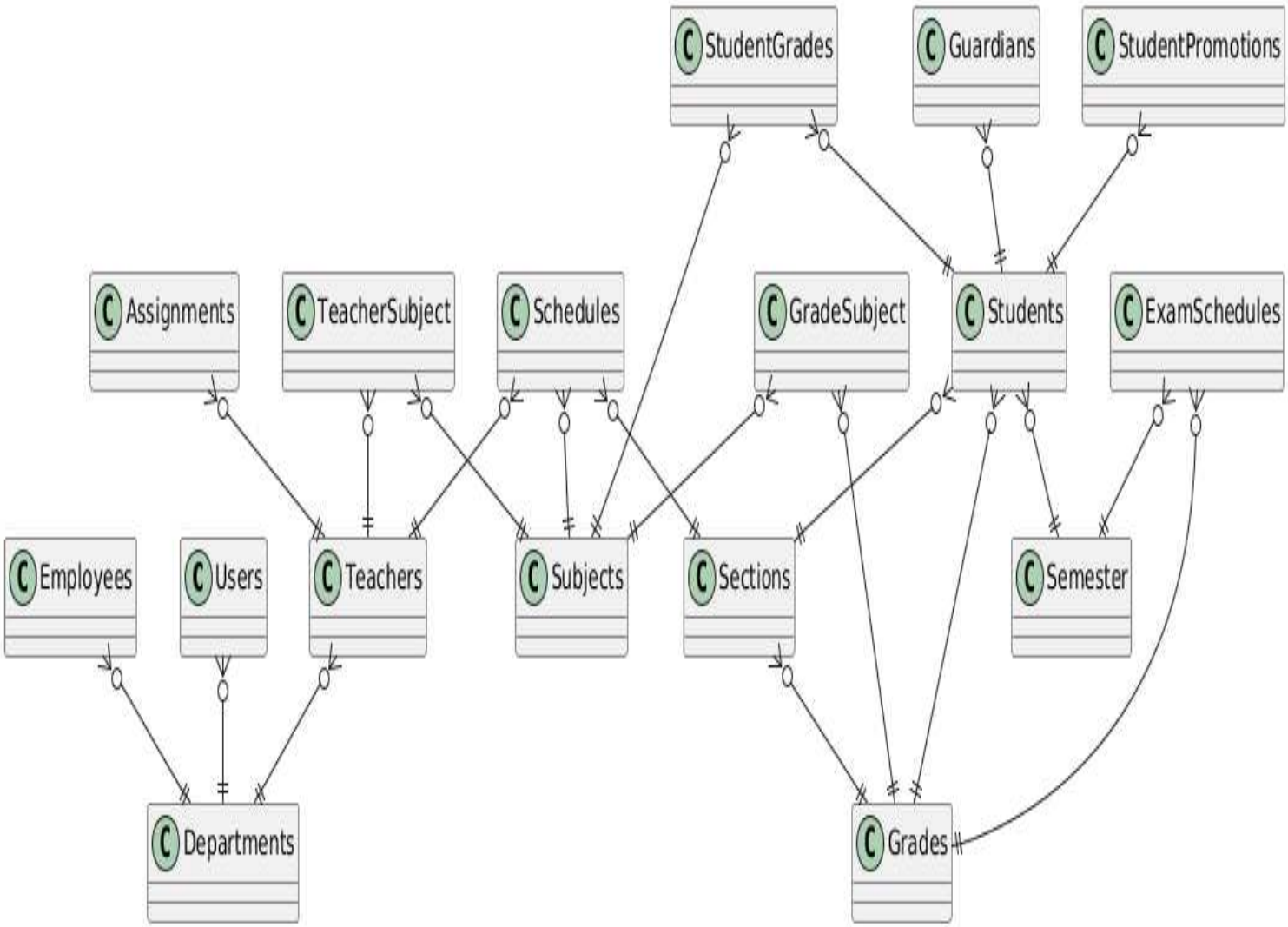


Figure 147. Class Diagram

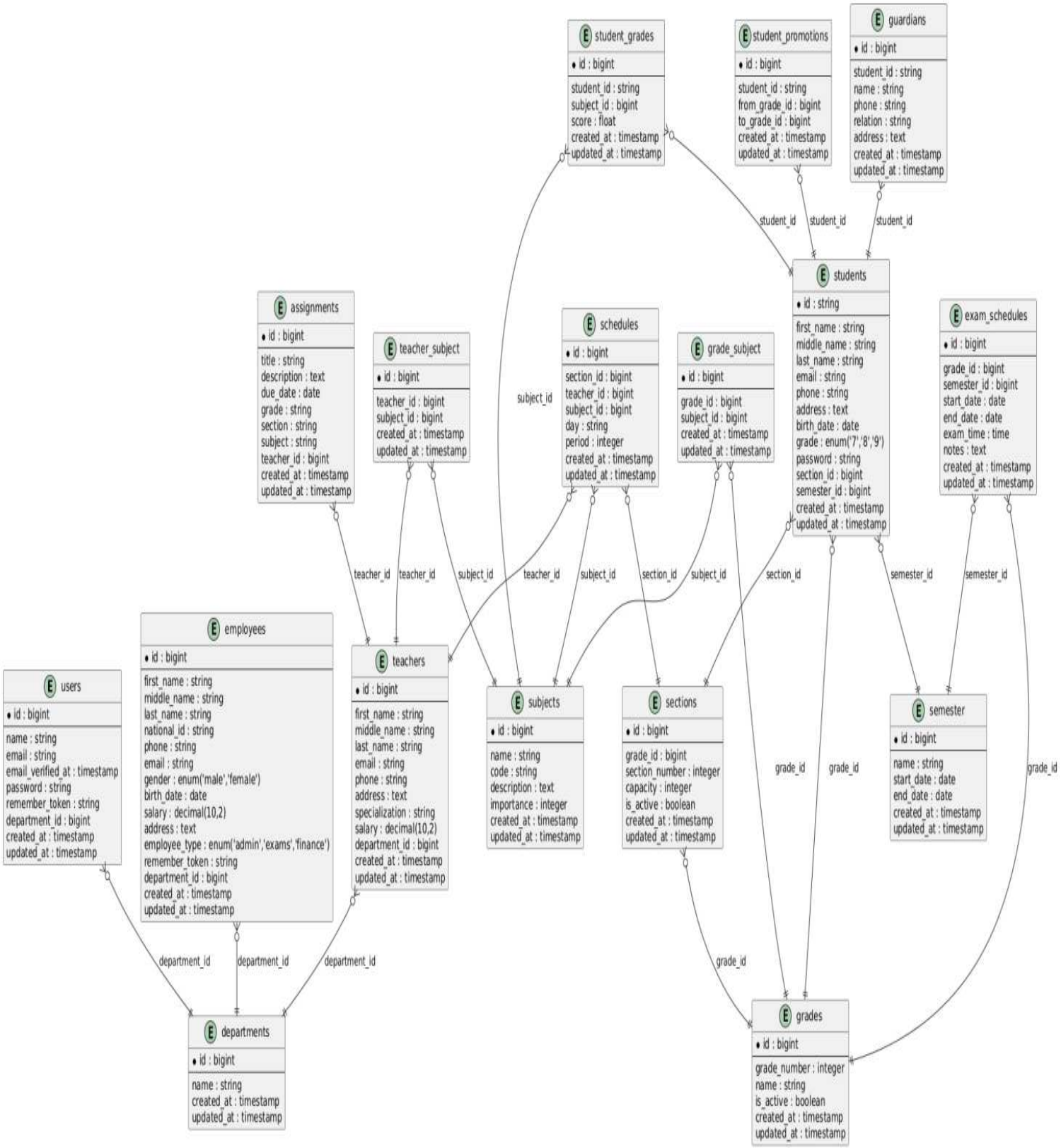


Figure 148. Table digrame Diagram

MVC Architecture: A Detailed Explanation

MVC stands for **Model-View-Controller**. It's one of the most popular architectural **design patterns** used in developing web applications and Graphical User Interfaces (GUIs). The primary goal of MVC is to achieve **Separation of Concerns** by dividing an application into three interconnected yet independent components, which enhances code maintainability, testability, and reusability.

Benefits of Using MVC Architecture:

- **Clear Separation of Concerns:** This is the biggest advantage. Each component is responsible for a specific part of the application. This makes the code cleaner, easier to understand, and simpler to maintain.
- **Maintainability:** When you need to change a part of the application (e.g., altering the UI design or updating data storage methods), you know exactly where to go. A change in one component doesn't necessarily affect the others.
- **Testability:** Since the components are separated, each can be individually tested (Unit Testing) with ease. For example, you can test the business logic in the Model without needing a user interface.
- **Reusability:** Model components can be reused in different contexts. For instance, you might use the same Model for a web application and a mobile application.
- **Parallel Development:** Different teams can work on different components simultaneously (one team on the View, another on the Model, and a third on the Controller), which speeds up the development process.
- **Scalability:** The MVC structure makes it easy to add new features or expand the application's scope.

Why Use MVC with Incremental Methodology?

Choosing MVC architecture for an application developed using Incremental Methodology is an excellent and highly logical decision due to several complementary reasons:

1. Natural Alignment with Iterative and Incremental Delivery:

- **MVC Facilitates Work Division:** Thanks to the clear separation of concerns in MVC, the team can easily define small, manageable "increments." Each increment can be defined as a set of functionalities requiring modifications or additions to the Model, View, and Controller.
- **Gradual Construction of Usable Functionality:** MVC allows us to build complete (though small) functionalities in each increment. For example, in the first increment, we might build a basic user registration model (Model), a registration interface (View), and the logic to handle registration (Controller). This "increment" is independently usable and testable.

- **Early Delivery of Value:** When you deliver a small part of the application (e.g., a complete login function), you provide real value to the client early on, which is the core principle of Incremental Methodology.

2. Effective Response to Feedback and Change:

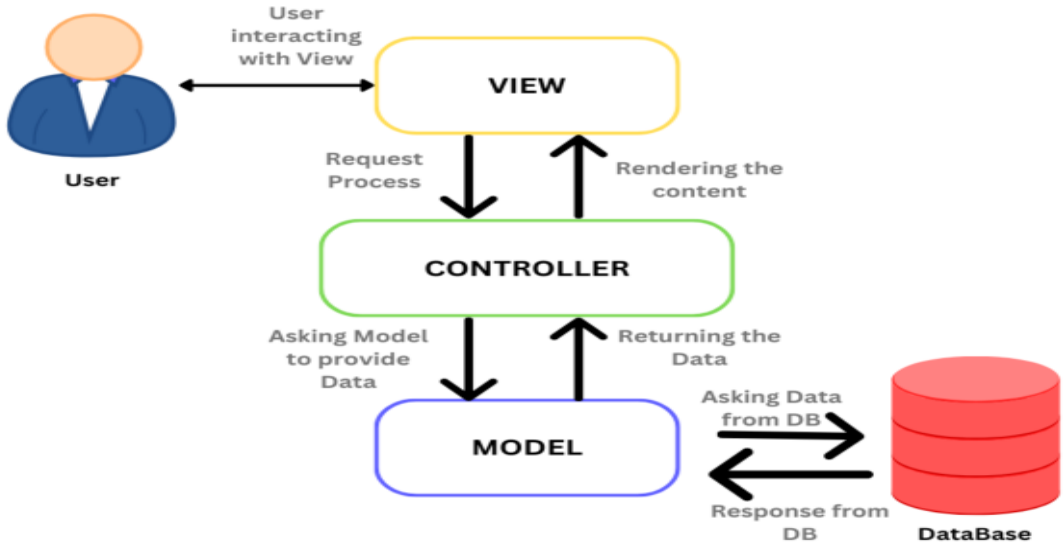
- **Ease of Modification:** Incremental Methodology heavily relies on early and frequent feedback. If a client requests a UI change, you can modify the "View" without affecting the "Model" or "Controller." If business logic needs to change, you can focus on the "Model." This reduces the scope of changes required in each iteration.
- **Reduced Rework:** Thanks to the separation of concerns, changes in one part don't necessitate a complete overhaul of other parts, which minimizes costly rework that might occur in less flexible methodologies.

3. Support for Parallel Development:

- In Incremental Methodology, work on multiple features or parts of the application often happens concurrently or in quick succession. MVC facilitates this by allowing different teams or programmers to work on the Model, View, and Controller independently, as long as they agree on the interfaces (APIs) between these components.

4. Improved Testability and Quality:

- Each delivered increment must be stable and high-quality. MVC makes it easier to test each component (Model, View, Controller) separately, ensuring that every part of the increment functions correctly before integration. This supports the Incremental Methodology's goal of delivering high-quality products repeatedly.



In summary, **MVC provides the organized and clear structure that Incremental Methodology needs to build applications piece by piece efficiently and flexibly.** It's like building a structure from prefabricated modules instead of building everything from scratches each time, which speeds up the process and makes it more manageable and adaptable to changes.

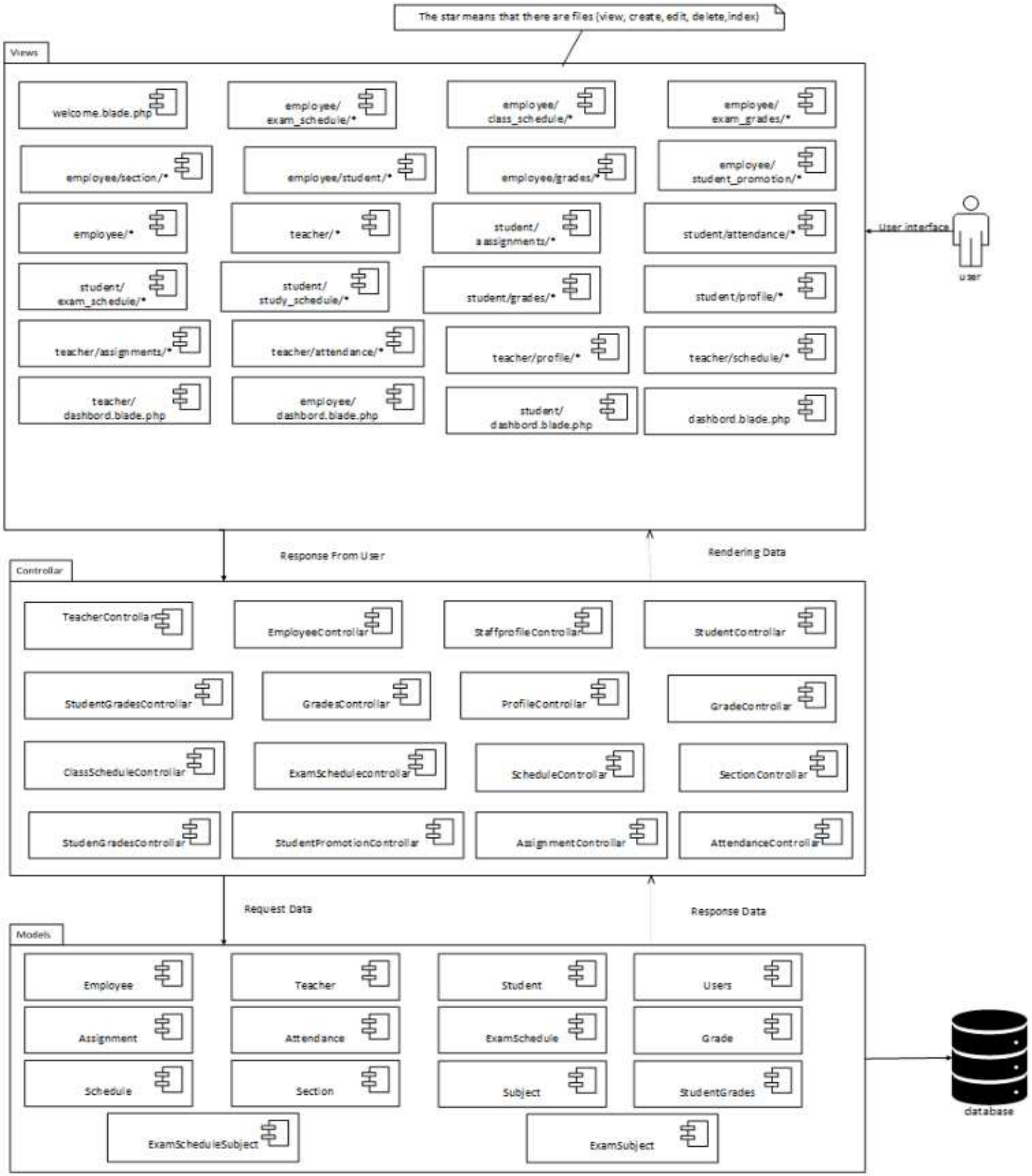


Figure 149. Component Diagram

4.2.1.Site MAP

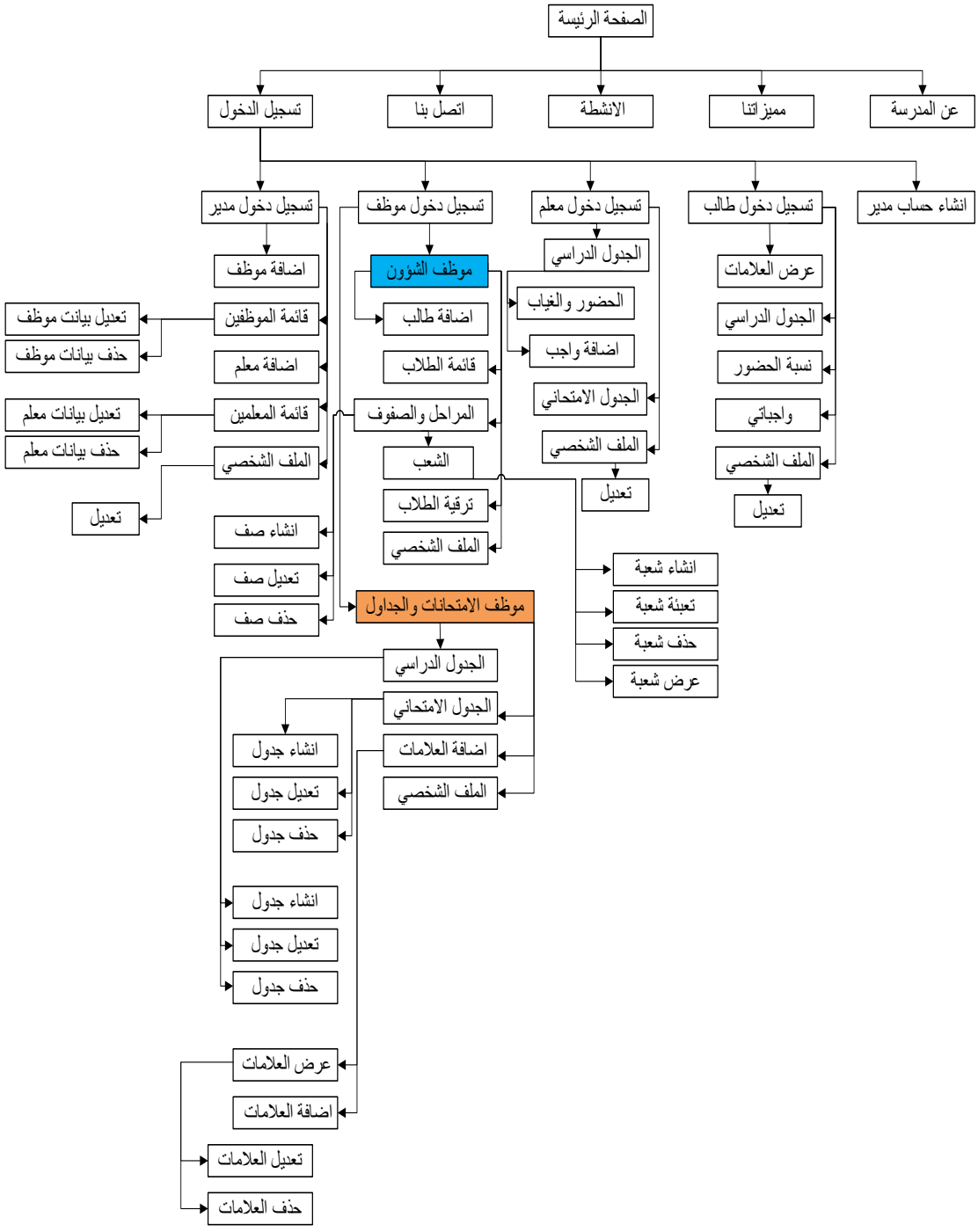


Figure 150. Site_MAP

5: IMPLEMENTATION

5. Technologies

The platform contains website, and we will display what are the technologies we have used in our project.

5.1. Frame Works

5.1.1. BOOTSTRAP:

Bootstrap framework is a user interface and website design Framework that allows for rapid and easy development. It was developed by a team at Twitter and has become One of the most popular frameworks for website Development.

Bootstrap offers a range of tools and ready-made Templates that make it easy for developers to Create responsive and attractive websites. It includes A large library of pre-designed styles and layouts, as well as support for interactive elements such as dropdown menus, Modal windows, and carousels.

In general, Bootstrap is used for developing websites That require responsive and user-friendly design, such as Blogs, e-commerce stores, and personal websites.



Figure 151. BOOTSTRAP

5.1.2. LARAVEL:

Laravel is a web application framework with expressive, elegant syntax.

We've already laid the foundation —

freeing you to create without sweating the small things.



Figure 152. LARAVEL

5.1.2. XAMPP:

a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages

5.2. Programming Languages

5.2.1. Hypertext Markup Language (HTML):

HTML is the standard markup language for creating Web pages.
It describes the structure of a Web page. In addition,
It consists of a series of elements.



Figure 153. HTML

5.2.2. Cascading Style Sheets (CSS):

CSS is the language that use to style an HTML document
And describes how HTML elements should be displayed.



Figure 154. CSS

5.2.3. Java Script:

JavaScript is a Manager-side and server-side scripting language
Inserted into HTML pages and is understood
By web browsers.
JavaScript is also an Object-based
Programming language.



Figure 155. JS

- **Some interfaces for the school program**






نظام إدارة المدرسة
مرحباً بك في لوحة تحكم موظف الشؤون الطلابية
استكشف مهامك اليومية والوصول السريع للأدوات.
إدارة الطلاب
إدارة بيانات الطلاب وإضافة طلاب جدد
عرض الطلاب


نظام إدارة المدرسة
جدول امتحانات السابع
طباعة
تعديل الجدول
عودة للقائمة
اليوم | التاريخ | المادة | وقت البدء | وقت الانتهاء
الثلاثاء | 2025-06-24 | فنون عامة | 10:30 | 11:30
الأربعاء | 2025-06-25 | الاجتماعيات | 09:30 | 10:30
الخميس | 2025-06-26 | العلوم | 09:30 | 10:30
الأحد | 2025-06-29 | التربية الإسلامية | 09:30 | 10:30
الاثنين | 2025-06-30 | الرياضيات | 09:30 | 10:30
الثلاثاء | 2025-07-01 | اللغة الفرنسية | 09:30 | 10:30
الأربعاء | 2025-07-02 | الحاسب الآلي | 09:30 | 10:30
الخميس | 2025-07-03 | اللغة العربية | 09:30 | 10:30
الأحد | 2025-07-06 | اللغة الانجليزية | 09:30 | 10:30


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يسعدنا تواجدك معنا في مسيرتنا التعليمية. هذه لوحتك الشخصية للوصول السريع إلى معلوماتك الأساسية وإدارة مهامك التعليمية بكفاءة.
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تاريخ تسليم نتائج اختبارات الشهر القادم هو 25 يونيو 2025
لوحة التحكم
الجدول الدراسي
الجدول الامتحاني
سامر
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الملف الشخصي
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لوحة تحكم المعلم
جدول الحصص
الفترة
الأحد
الإثنين
الثلاثاء
الأربعاء
الخميس
1
2
لوحة التحكم
الجدول الدراسي
الجدول الامتحاني
سامر
معلم
الملف الشخصي
تسجيل الخروج


بوابة الطالب
الرقم الأكاديمي: 25701
لوحة التحكم
الدرجات
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سجل الحضور
الإعدادات والملف الشخصي
تسجيل الخروج
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معلوماتك الشخصية
اكتشف التفاصيل الأساسية التي تُعرف بك في رحلتك التعليمية
الاسم الكامل: ماجد احمد مراد
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الصف الدراسي: 7
الشعبة: 1
معلومات التواصل
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روابط سريعة ومفيدة

6: TESTS

6.1. Test Cases

1. **Login (Manager)**

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-1	T-1-0	Manager login account (Valid credentials)	1.navgate to login bottom 2.Provide valid information 3.Click on login	Manager should enter to Manager page	Manager entered to Manager page	Pass
	T-1-1	Manager login account (on fields at less Empty)	1.navgate to login bottom 2.one fields at less empty 3.Click on login	Manager should be told incomplete fields	Manager told incomplete fields And don't entered to Manager page	pass
	T-1-2	Manager login account (username or password is not correct)	1.navgate to sign up page 2. provide weak password 3.Click on login	Manager should be notified that user name and password is not correct and try again	Manager should be notified that user name and password is not correct	pass

Table 76. Test Cases (Login)

2. **View profile (information personal) (Manager)**

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-2	T-2-0	Manager view personal information	1.press bottom to see personal information 2.navgate to personal information page	Manager should see his information	Manager see his information	Pass
	T-2-1	Manager view personal information (session done)	1.press bottom to see personal information	Manager should see his information	A failure message appears and asking To register again	Pass
	T-2-2	Manager view personal information (error in data base)	1.press bottom to see personal information	Manager should see his information	A failure message appears	Pass

Table 77. Test Cases (View profile (information personal))

3. Edit profile (information personal) (Manager)

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-3	T-3-0	Manager edit personal information	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit 4.press Confirm button	Manager should edit information And see massage to prove that	Manager edit information and see massage to prove that	Pass
	T-3-1	Manager edit personal information (session done)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Manager should edit information And see massage to prove that	A failure message appears and asking To register again	Pass
	T-3-2	Manager edit personal information (error in data base)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Manager should edit information And see massage to prove that	A failure message appears	Pass

Table 78. Test Cases (Edit profile (information personal) (Manager))

4. **Show teacher list (Manager)**

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-4	T-4-0	Manager view list of teachers	1.press bottom to view the list	System should display the list	System displays the list	Pass
	T-4-1	Manager view list of teachers (empty data base)	1.press bottom to view the list	System should display the list	System displays empty list	pass

Table 79. Test Cases (Show teacher list)

5. Add Teacher (Manager)

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-5	T-5-0	Manager add new teacher	1.press bottom to add teacher 2.display form to add information 3.prress bottom confirm	Data base should save information and display confirm massage	Data base save information and display confirm massage	Pass
	T-5-1	Manager add new teacher (Leave box empty)	1.press bottom to add teacher 2.display form to add information	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking To fall the empty box	pass
	T-5-2	Manager add new teacher (right wrong information)	1.press bottom to add teacher 2.display form to add information	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking To edit the wrong information	pass

Table 80. Test Cases (Add Teacher)

6. Edit information teacher (Manager)

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-6	T-6-0	Manager edit teacher information	1.press bottom to edit teacher information 2.display form to edit information 3.prress bottom confirm	Data base should save information and display confirm massage	Data base save information and display confirm massage	Pass
	T-6-1	Manager edit teacher information (Leave box empty)	1.press bottom to edit teacher information 2.display form to edit information	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking To fall the empty box	pass
	T-6-2	Manager edit teacher information (right wrong information)	1.press bottom to edit teacher information 2.display form to edit information	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking To edit the wrong information	pass

Table 81. Test Cases (Edit information teacher)

7. **Delete teacher (Manager)**

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-7	T-7-0	Manager delete teacher	1.press bottom to view the list 2.press bottom to delete teacher	System should display the list And delete teacher from the list	System displays the list And delete teacher from the list	Pass
	T-7-1	Manager view list of teachers (empty data base)	1.press bottom to view the list	System should display the list	System displays empty list	pass

Table 82. Test Cases (Delete teacher)

8. Log out (Manager)

Test case ID	Test Case number	Test title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-8	T-8-0	Manager log out	1.press bottom to log out 2.display login page	Manager should log out and see log in page	Manager log out and disconnect with data base	Pass

Table 83. Test Cases (Log out)

9. Show Employee list (Manager)

Test id	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-9	T-9-0	Manager view list of Employee	1.press bottom to view the list	System should display the list	System displays the list	Pass
	T-9-1	Manager view list of Employee (empty data base)	1.press bottom to view the list	System should display the list	System displays empty list	pass

Table 84. Test Cases (Show Employee list)

10. Add Employee (Manager)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-10	T-10-1	Manager adds a new employee	1-Click on the Add employee button 2-Show form for data entry 3-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-10-2	Manager adds a new employee (Leave box empty)	1-Click on the Add employee button 2-Show form for data entry	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking to fall the empty box	Pass
	T-10-3	Manager adds a new employee (Write wrong information)	1-Click on the Add employee button 2-Show form for data entry	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking to edit the wrong information	Pass

Table 85. Test Cases (Add Employee)

11. Edit Information Employee (Manager)

Test id	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-11	T-11-0	Manager edit Employee information	1.press bottom to edit Employee information 2.display form to edit information 3.prress bottom confirm	Data base should save information and display confirm massage	Data base save information and display confirm massage	Pass
	T-11-1	Manager edit Employee information (Leave box empty)	1.press bottom to edit Employee information 2.display form to edit information	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking To fall the empty box	pass
	T-11-2	Manager edit Employee information (right wrong information)	1.press bottom to edit Employee information 2.display form to edit information	Manager should press confirm bottom and system display confirm massage	A failure message appears and asking To edit the wrong information	pass

Table 86. Test Cases (Edit Information Employee)

12. Delete Employee (Manager)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-12	T-12-1	Manager Request to delete employee	1-Click on the Show employee List button 4-Select the desired employee	Delete the employee from the database and display a message about that	Delete the employee from the database and display a message about that	Pass
	T-12-2	Manager Request to delete employee (fail in data base)	1-Click on the Show employee List button 4-Select the desired employee	Delete the employee from the database and display a message about that	A failure message appears and try again	Pass
	T-12-3	Manager Request to delete employee (no employee found)	1-Click on the Show employee List button	Show information about employee to select the employee to be deleted	A failure message appears and asking to add employee first	Pass

Table 87. Test Cases (Delete Employee)

13. Search (Manager)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-13	T-13-1	Find an employee	1-Click on the Search box 2-Select the rules of search 3-Click on search button	Show results matching your search terms	Show results matching your search terms	Pass
	T-13-2	Find an employee (empty rule)	1-Click on the Search box 2-Select the rules of search	Click the search button to view the results	A failure message appears and asking to fil empty box	Pass
	T-13-3	Find an employee (on employee found)	1-Click on the Search box 2-Select the rules of search 3-Click on search button	Show information about employee to select the employee to be deleted	A failure message appears and asking to add employee first	Pass

Table 88. Test Cases (Search)

14. Create Account manager (Manager)

Test id	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-14	T-14-0	New Manager signup (no old manager on system)	1- Open signup page 2- Input information (name,id, ets) 3- Click on signup	New Manager should enter to Manager page	New entered to Manager page	Pass
	T-14-1	New Manager signup (on fields at less Empty)	1- Open signup page 2- Input information(name,id, ets) 3- Click on signup	New Manager should be told incomplete fields	New Manager told incomplete fields And don't entered to Manager page	pass
	T-14-2	New Manager signup(old manager on system)	1. Open signup page 2. Input information(3. name,id, ets) 4. Click on signup	New Manager should not enter to Manager page	Show massage (there are manager on system)	pass

Table 89. Test Cases (Create Account manager)

15. Login (Employee)

Test id	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-15	T-15-0	Employee login account (Valid credentials)	1.navgate to login bottom 2.Provide valid information 3.Click on login	Employee should enter to Employee page	Employee entered to Employee page	Pass
	T-15-1	Employee login account (on fields at less Empty)	1.navgate to login bottom 2.one fields at less empty 3.Click on login	Employee should be told incomplete fields	Employee told incomplete fields And don't entered to Employee page	pass
	T-15-2	Employee login account (username or password is not correct)	1.navgate to sign up page 2. provide weak password 3.Click on login	Employee should be notified that user name and password is not correct and try again	Employee should be notified that user name and password is not correct	pass

Table 90. Test Cases (Login)

16. View profile (information personal) (Employee)

Test id	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-16	T-16-0	Employee view personal informati on	1.press bottom to see personal information 2.navgate to personal information page	Employee should see his information	Employee see his information	Pass
	T-16-1	Employee view personal informati on (session done)	1.press bottom to see personal information	Employee should see his information	A failure message appears and asking To register again	pass
	T--2	Employee view personal informati on (error in data base)	1.press bottom to see personal information	Employee should see his information	A failure message appears	pass

Table 91. Test Cases (View profile (information personal))

17. Edit profile (information personal) (Employee)

Test id	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-8	T-8-0	Employee Edit Personal informati on	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit 4.press Confirm button	Employee should edit information And see massage to prove tha	Employee edit information and see massage to prove that	Pass
	T-8-1	Employee edit personal informati on (session done)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Employee should edit information And see massage to prove that	A failure message appears and asking To register again	pass
	T-8-2	Manager edit personal informati on (error in data base)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Employee should edit information And see massage to prove that	A failure message appears	pass

Table 92. Test Cases (Edit profile (information personal))

18. Log out (Employee)

Test id	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass/ Fail
T-18	**T-18-0**	**Employee log out**	**1.press bottom to log out 2.display login page**	**Employee should log out and see log in page**	**Employee log out and disconnect with data base**	**Pass**

Table 93. Test Cases (Log out)

19. Show Student list (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-19	T-19-1	Student Affairs Request page of list of students	1-Click on the Show Student List button 2-Select the required class information 3- Select the required division information	Show information about students	Show information about students	Pass
	T-19-2	Student Affairs Request page of list of students (No class found)	1-Click on the Show Student List button	Show the classes in which students are present	A failure message appears and asking to create class first	Pass
	T-19-3	Student Affairs Request page of list of students (No class found)	1-Click on the Show Student List button 2-Select the required class information	Show the divisions in which students are present	A failure message appears and asking to create division first	Pass
	T-19-4	Student Affairs Request page of list of students (No student found)	1-Click on the Show Student List button 2-Select the required class information 3- Select the required division information	Show information about students	A failure message appears and asking to add student first	Pass

Table 94. Test Cases (Show Student list)

20. Add student (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-20	T-20-1	Student Affairs adds a new student	1-Click on the Add student button 2-Show form for data entry 3-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-20-2	Student Affairs adds a new student (Leave box empty)	1-Click on the Add student button 2-Show form for data entry	Student Affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to fall the empty box	Pass
	T-20-3	Student Affairs adds a new student (Write wrong information)	1-Click on the Add student button 2-Show form for data entry	Student Affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to edit the wrong information	Pass

Table 95. Test Cases (Add student)

21. Edit Information Student (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-21	T-21-1	Student Affairs wants to edit student information	1-Click on the student list button 2-Select the desired student 3-Enter information	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-21-2	Student Affairs wants to edit student information (Leave box empty)	1-Click on the student list button 2-Select the desired student	Student Affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to fall the empty box	Pass
	T-21-3	Student Affairs wants to edit student information (Write wrong information)	1-Click on the student list button 2-Select the desired student	Student Affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to edit the wrong information	Pass
	T-21-4	Student Affairs wants to edit student information (no student found)	1-Click on the student list button	Show list of students	Show error message and ask to first add student	Pass

Table 96. Test Cases (Edit Information Student)

22. Delete Student (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-22	T-22-1	Student Affairs Request to delete student	1-Click on the Show Student List button 2-Select the required class information 3- Select the required division information 4-Select the desired student	Delete the student from the database and display a message about that	Delete the student from the database and display a message about that	Pass
	T-22-2	Student Affairs Request to delete student (fail in data base)	1-Click on the Show Student List button 2-Select the required class information 3- Select the required division information 4-Select the desired student	Delete the student from the database and display a message about that	A failure message appears and try again	Pass
	T-22-3	Student Affairs Request to delete student (no student found)	1-Click on the Show Student List button 2-Select the required class information 3- Select the required division information 4-Select the desired student	Show information about students to select the student to be deleted	A failure message appears and asking to add student first	Pass

Table 97. Test Cases (Delete Student)

23. Create Class (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-23	T-23-1	Student affairs want create new class	1-Click on the create class button 2-Show form for data entry 3-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-23-2	Student affairs want create new class (Leave box empty)	1-Click on the create class button 2-Show form for data entry	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to fall the empty box	Pass
	T-23-3	Student affairs want create new class (Write wrong information)	1-Click on the create class button 2-Show form for data entry	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to edit the wrong information	Pass

Table 98. Test Cases (Create Class)

24. Edit Information Class (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-24	T-24-1	Student affairs want edit class information	1-Click on the class list button 2-chose class 3-Show form for edit data 4-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-24-2	Student affairs want edit class information (Leave box empty)	1-Click on the class list button 2-chose class 3-Show form for edit data	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to fall the empty box	Pass
	T-24-3	Student affairs want edit class information (Write wrong information)	1-Click on the class list button 2-chose class 3-Show form for edit data 4-press bottom confirm	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to edit the wrong information	Pass
	T-24-4	Student affairs want edit class information (no class found)	1-Click on the class list button	Show list of classes	A failure message appears and asking to add class first	Pass

Table 99. Test Cases (Edit Information Class)

25. Delete Class (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-25	T-25-1	Student affairs want delete class	1-Click on the class list button 2-chose class 3-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-25-2	Student affairs want delete class (no class found)	1-Click on the class list button	Show list of classes	A failure message appears and asking to add class first	Pass

Table 100. Test Cases (Delete Class)

26. Create division (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-26	T-26-1	Student affairs want create new division	1-Click on the create division button 2-Show form for data entry 3-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-26-2	Student affairs want create new division (Leave box empty)	1-Click on the create division button 2-Show form for data entry	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to fall the empty box	Pass
	T-26-3	Student affairs want create new division (Write wrong information)	1-Click on the create division button 2-Show form for data entry	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to edit the wrong information	Pass
	T-26-4	Student affairs want create new division (no class found)	1-Click on the create division button	Display form to enter information	A failure message appears and asking to add class first	Pass

Table 101. Test Cases (Create division)

27. Edit Information division (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-27	T-27-1	Student affairs want edit division information	1-Click on the class list button 2-chose division 3-Show form for edit data 4-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-27-2	Student affairs want edit division information (Leave box empty)	1-Click on the list button 2-chose division 3-Show form for edit data	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to fall the empty box	Pass
	T-27-3	Student affairs want edit division information (Write wrong information)	1-Click on the class list button 2-chose division 3-Show form for edit data 4-press bottom confirm	Student affairs should press confirm bottom and system display confirm massage	A failure message appears and asking to edit the wrong information	Pass
	T-27-4	Student affairs want edit class information (not class found)	1-Click on the class list button	Show list of classes	A failure message appears and asking to add class first	Pass
	T-28-5	Student affairs want edit class information (no division found)	1-Click on the class list button	Show list of divisions	A failure message appears and asking to add division first	Pass

Table 102. Test Cases (Edit Information division)

28. Delete division (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-28	T-28-1	Student affairs want delete division	1-Click on the class list button 2-chose division 3-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-28-2	Student affairs want delete division (no class found)	1-Click on the class list button	Show list of classes	A failure message appears and asking to add class first	Pass
	T-28-3	Student affairs want delete division (no division found)	1-Click on the class list button	Show list of divisions	A failure message appears and asking to add division first	Pass

Table 103. Test Cases (Delete division)

29. Adding students to academic classes (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-29	T-29-1	Student Affairs adds student to division	1-Click on the Add student button 2-Show Divisions 3-chose student 4-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-29-2	Student Affairs adds student to division (no division found)	1-Click on the Add student button	Show list of Divisions	A failure message appears and asking to add division first	Pass
	T-29-3	Student Affairs adds student to division (no student found)	1-Click on the Add student button 2-Show Divisions	Show list of Students	A failure message appears and asking to add student first	Pass
	T-29-4	Student Affairs adds student to division (Division is full)	1-Click on the Add student button 2-Show Divisions 3-chose student 4-press bottom confirm	Data base should save information and display confirm massage	A failure message appears and display massage division is full	Pass

Table 104. Test Cases (Adding students to academic classes)

30. Transferring a student to another division (Student Affairs)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-30	T-30-1	Student Affairs Change student to division another division	1-Click on the Edit student button 2-Show Divisions 3-chose Division 4-press bottom confirm	Data base should save information and display confirm massage	Data base should save information and display confirm massage	Pass
	T-30-2	Student Affairs Change student to division another division (Division is full)	1-Click on the Edit student button 2-Show Divisions 3-chose Division 4-press bottom confirm	Data base should save information and display confirm massage	A failure message appears and display massage division is full	Pass

Table 105. Test Cases (Transferring a student to another division)

31. Create an exam schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-31	T-31-1	Examination Employee wants to create an examination schedule	1.Click on the Create Table button 2.Select class, subjects and days 3.Click the confirm button.	Show message when table is created and displayed	Show message when table is created and displayed	Pass
	T-31-2	Examination Employee wants to create an examination schedule (no class found)	1.Click on the Create Table button 2.Select class, subjects and days	Show available classes	Show error message about adding a class	Pass
	T-31-3	Examination Employee wants to create an examination schedule (no student found)	1.Click on the Create Table button 2.Select class, subjects and days	Show available students	Show error message about adding a student	Pass
	T-31-4	Examination Employee wants to create an examination schedule (conflict)	1.Click on the Create Table button 2.Select class, subjects and days 3.Click the confirm button.	Create table successfully	Show an error message indicating a conflict.	Pass

Table 106. Test Cases (Create an exam schedule)

32. View exam schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-32	T-32-1	Examination Employee wants to view schedule	1.Select the desired class 2.Click on the view Table button	Show the required exam schedule	Show the required exam schedule	Pass
	T-32-2	Examination Employee wants to view schedule (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-32-3	Examination Employee wants to create an examination schedule (no schedule found)	1. Select the desired class 2.Click on the view Table button	Show available schedule	Show error message about adding a schedule	Pass

Table 107. Test Cases (View exam schedule)

33. Edit exam schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-33	T-33-1	Examination Employee wants to edit schedule	1.Select the desired class 2.Click on the edit Table button 3.Confirm modification	Show modification confirmation message	Show modification confirmation message	Pass
	T-33-2	Examination Employee wants to edit schedule (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-33-3	Examination Employee wants to edit an examination schedule (no schedule found)	1. Select the desired class 2.Click on the edit Table button	Show available schedule	Show error message about adding a schedule	Pass

Table 108. Test Cases (Edit exam schedule)

34. Delete exam schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-34	T-34-1	Examination Employee wants to delete schedule	1.Select the desired class 2.Click on the delete Table button 3.Confirm delete	Show deletion confirmation message	Show deletion confirmation message	Pass
	T-34-2	Examination Employee wants to delete schedule (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-34-3	Examination Employee wants to delete an examination schedule (no schedule found)	1. Select the desired class 2.Click on the delete Table button	Show available schedule	Show error message about no schedule found	Pass
	T-34-4	Examination Employee wants to delete an examination schedule (Deletion error)	1.Select the desired class 2.Click on the delete Table button 3.Confirm delete	Show deletion confirmation message	Show error message about Deletion error	Pass

Table 109. Test Cases (Delete exam schedule)

35. Add grades (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-35	T-35-1	Examination Employee wants to add grade	1.Select the desired class 2.Select the desired student 3.Confirm entry	Show message that the grade has been entered	Show message that the grade has been entered	Pass
	T-35-2	Examination Employee wants to add grade (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-35-3	Examination Employee wants to add grade (no students found)	1. Select the desired class 2. Select the desired student	Show available students	Show error message about adding students	Pass
	T-35-4	Examination Employee wants to add grade (no exam found)	1.Select the desired class 2.Select the desired student	Show available exams	Show error message about no exam found	Pass

Table 110. Test Cases (Add grades)

36. View grades (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-36	T-36-1	Examination Employee wants to view grade	1.Select the desired class 2.Select the desired student	Show student grades	Show student grades	Pass
	T-36-2	Examination Employee wants to view grade (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-36-3	Examination Employee wants to view grade (no students found)	1. Select the desired class 2. Select the desired student	Show available students	Show error message about adding students	Pass
	T-36-4	Examination Employee wants to view grade (no exam found)	1.Select the desired class 2.Select the desired student	Show available exams	Show error message about no exam found	Pass

Table 111. Test Cases (View grades)

37. Edit grades (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-37	T-37-1	Examination Employee wants to edit grade	1.Select the desired class 2.Select the desired student 3. Confirm modification	Show modification confirmation message	Show modification confirmation message	Pass
	T-37-2	Examination Employee wants to edit grade (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-37-3	Examination Employee wants to edit grade (no students found)	1. Select the desired class 2. Select the desired student	Show available students	Show error message about adding students	Pass
	T-37-4	Examination Employee wants to edit grade (no exam found)	1.Select the desired class 2.Select the desired student	Show available exams	Show error message about no exam found	Pass

Table 112. Test Cases (Edit grades)

38. Delete grades (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-38	T-38-1	Examination Employee wants to delete grade	1.Select the desired class 2.Select the desired student 3. Confirm deletion	Show modification deletion message	Show modification deletion message	Pass
	T-38-2	Examination Employee wants to delete grade (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-38-3	Examination Employee wants to delete grade (no students found)	1. Select the desired class 2. Select the desired student	Show available students	Show error message about adding students	Pass
	T-38-4	Examination Employee wants to delete grade (no exam found)	1.Select the desired class 2.Select the desired student	Show available exams	Show error message about no exam found	Pass

Table 113. Test Cases (Delete grades)

39. Create schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-39	T-39-1	Examination Employee wants to create a Study schedule	1.Click on the Create Table button 2.Select class, subjects and days 3.Click the confirm button.	Show message when table is created and displayed	Show message when table is created and displayed	Pass
	T-39-2	Examination Employee wants to create a Study schedule (no class found)	1.Click on the Create Table button 2.Select class, subjects and days	Show available classes	Show error message about adding a class	Pass
	T-39-3	Examination Employee wants to create a Study schedule (no student found)	1.Click on the Create Table button 2.Select class, subjects and days	Show available students	Show error message about adding a student	Pass
	T-39-4	Examination Employee wants to create a Study schedule (conflict)	1.Click on the Create Table button 2.Select class, subjects and days 3.Click the confirm button.	Create table successfully	Show an error message indicating a conflict.	Pass

Table 114. Test Cases (Create schedule)

40. Edit schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-40	T-40-1	Examination Employee wants to edit schedule	1.Select the desired class 2.Click on the edit Table button 3.Confirm modification	Show modification confirmation message	Show modification confirmation message	Pass
	T-40-2	Examination Employee wants to edit schedule (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-40-3	Examination Employee wants to edit an examination schedule (no schedule found)	1. Select the desired class 2.Click on the edit Table button	Show available schedule	Show error message about adding a schedule	Pass

Table 115. Test Cases (Edit schedule)

41. Delete schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-41	T-41-1	Examination Employee wants to delete schedule	1.Select the desired class 2.Click on the delete Table button 3.Confirm delete	Show deletion confirmation message	Show deletion confirmation message	Pass
	T-41-2	Examination Employee wants to delete schedule (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-41-3	Examination Employee wants to delete an examination schedule (no schedule found)	1. Select the desired class 2.Click on the delete Table button	Show available schedule	Show error message about no schedule found	Pass
	T-41-4	Examination Employee wants to delete an examination schedule (Deletion error)	1.Select the desired class 2.Click on the delete Table button 3.Confirm delete	Show deletion confirmation message	Show error message about Deletion error	Pass

Table 116. Test Cases (Delete schedule)

42. View schedule (Examination Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-42	T-42-1	Examination Employee wants to view schedule	1.Select the desired class 2.Click on the view Table button	Show the required study schedule	Show the required study schedule	Pass
	T-42-2	Examination Employee wants to view schedule (no class found)	1. Select the desired class	Show available classes	Show error message about adding a class	Pass
	T-42-3	Examination Employee wants to create an examination schedule (no schedule found)	1. Select the desired class 2.Click on the view Table button	Show available schedule	Show error message about adding a schedule	Pass

Table 117. Test Cases (View schedule)

43. login (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-43	T-43-1	Student login account (Valid credentials)	1.navgate to login bottom 2.Provide valid information 3.Click on login	Student should enter to Employee page	Student entered to Student page	Pass
	T-43-2	Student login account (on fields at less Empty)	1.navgate to login bottom 2.one fields at less empty 3. Click on login	Student should be told incomplete fields	Student told incomplete fields and don't enter to Student page	Pass
	T-43-3	Student login account (username or password is not correct)	1.navgate to sign up page 2. provide weak password 3. Click on login	Student should be notified that user name and password is not correct and try again	Student should be notified that user name and password is not correct	Pass

Table 118. Test Cases (login)

44. Log out (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-44	T-44-1	Student log out	1.press bottom to log out 2.display login page	Student should log out and see log in page	Student log out and disconnect with data base	Pass

Table 119. Test Cases (Log out)

45. View profile (information personal) (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-45	T-45-1	Student view personal information	1.press bottom to see personal information 2.navgate to personal information page	Student should see his information	Student see his information	Pass
	T-45-2	Student view personal information (session done)	1.press bottom to see personal information	Student should see his information	A failure message appears and asking To register again	Pass
	T-45-3	Student view personal information (error in data base)	1.press bottom to see personal information	Student should see his information	A failure message appears	Pass

Table 120. Test Cases (View profile (information personal))

46. Edit profile (information personal) (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-46	T-46-1	Student edit personal information	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit 4.press Confirm button	Personal data modification confirmation message	Personal data modification confirmation message	Pass
	T-46-2	Student edit personal information (session done)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Student should edit his information	A failure message appears and asking To register again	Pass
	T-46-3	Student edit personal information (error in data base)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Student should edit his information	A failure message appears	Pass

Table 121. Test Cases (Edit profile (information personal))

47. View grades (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-47	T-47-1	Student view grades	1.press bottom to see grades 2.navgate to grades page	Student should see his grades	Student should see his grades	Pass
	T-47-2	Student view grades (session done)	1.press bottom to see grades 2.navgate to grades page	Student should see his grades	A failure message appears and asking To register again	Pass
	T-47-3	Student view grades (error in data base)	1.press bottom to see grades 2.navgate to grades page	Student should see his grades	A failure message appears	Pass

Table 122. Test Cases (View grades)

48. View Exam Schedule (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-48	T-48-1	Student view Exam Schedule	1.press bottom to see Exam Schedule 2.navgate to Exam Schedule page	Student should see his Exam Schedule	Student should see his Exam Schedule	Pass
	T-48-2	Student view Exam Schedule (session done)	1.press bottom to see Exam Schedule 2.navgate to Exam Schedule page	Student should see his Exam Schedule	A failure message appears and asking To register again	Pass
	T-48-3	Student view Exam Schedule (error in data base)	1.press bottom to see Exam Schedule 2.navgate to Exam Schedule page	Student should see his Exam Schedule	A failure message appears	Pass

Table 123. Test Cases (View Exam Schedule)

49. View Schedule (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-49	T-49-1	Student view Schedule	1.press bottom to see Schedule 2.navgate to Schedule page	Student should see his Schedule	Student should see his Schedule	Pass
	T-49-2	Student view Schedule (session done)	1.press bottom to see Schedule 2.navgate to Schedule page	Student should see his Schedule	A failure message appears and asking To register again	Pass
	T-49-3	Student view Schedule (error in data base)	1.press bottom to see Schedule 2.navgate to Schedule page	Student should see his Schedule	A failure message appears	Pass

Table 124. Test Cases (View Schedule)

50. View Absences and lineage (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-50	T-50-1	Student view Absences and lineage	1.press bottom to see Absences and lineage 2.navgate to Absences and lineage page	Student should see his Absences and lineage	Student should see his Absences and lineage	Pass
	T-50-2	Student view Absences and lineage (session done)	1.press bottom to see Absences and lineage 2.navgate to Absences and lineage page	Student should see his Absences and lineage	A failure message appears and asking To register again	Pass
	T-50-3	Student view Absences and lineage (error in data base)	1.press bottom to see Absences and lineage 2.navgate to Absences and lineage page	Student should see his Absences and lineage	A failure message appears	Pass

Table 125. Test Cases (View Absences and lineage)

51. login (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-51	T-51-1	Teacher login account (Valid credentials)	1.navgate to login bottom 2.Provide valid information 3.Click on login	Teacher should enter to Employee page	Teacher entered to Teacher page	Pass
	T-51-2	Teacher login account (on fields at less Empty)	1.navgate to login bottom 2.one fields at less empty 3. Click on login	Teacher should be told incomplete fields	Teacher told incomplete fields and don't enter to Teacher page	Pass
	T-51-3	Teacher login account (username or password is not correct)	1.navgate to sign up page 2. provide weak password 3. Click on login	Teacher should be notified that user name and password is not correct and try again	Teacher should be notified that user name and password is not correct	Pass

Table 126. Test Cases (login)

52. Log out (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-52	T-52-1	Teacher logout	1.press bottom to log out 2.display login page	Teacher should log out and see log in page	Teacher logout and disconnect with data base	Pass

Table 127. Test Cases (Log out)

53. View profile (information personal) (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-53	T-53-1	Teacher view personal information	1.press bottom to see personal information 2.navgate to personal information page	Teacher should see his information	Student see his information	Pass
	T-53-2	Teacher view personal information (session done)	1.press bottom to see personal information	Teacher should see his information	A failure message appears and asking To register again	Pass
	T-53-3	Teacher view personal information (error in data base)	1.press bottom to see personal information	Teacher should see his information	A failure message appears	Pass

Table 128. Test Cases (View profile (information personal))

54. Edit profile (information personal) (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-54	T-54-1	Teacher edits personal information	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit 4.press Confirm button	Personal data modification confirmation message	Personal data modification confirmation message	Pass
	T-54-2	Teacher edits personal information (session done)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Teacher should edit his information	A failure message appears and asking To register again	Pass
	T-54-3	Teacher edits personal information (error in data base)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Teacher should edit his information	A failure message appears	Pass

Table 129. Test Cases (Edit profile (information personal))

55. View Schedule (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-55	T-55-1	Teacher view Schedule	1.press bottom to see Schedule 2.navgate to Schedule page	Teacher should see his Schedule	Teacher should see his Schedule	Pass
	T-55-2	Teacher view Schedule (session done)	1.press bottom to see Schedule 2.navgate to Schedule page	Teacher should see his Schedule	A failure message appears and asking To register again	Pass
	T-55-3	Teacher view Schedule (error in data base)	1.press bottom to see Schedule 2.navgate to Schedule page	Teacher should see his Schedule	A failure message appears	Pass

Table 130. Test Cases (View Schedule)

56. Presence and absence (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-56	T-56-1	The teacher records attendance and absence.	1.press class list page 2.navgate to schedule page 3. select specific class 4. record Presence and absence	The system must record attendance and absence	The system must record attendance and absence	Pass
	T-56-2	The teacher records attendance and absence. (session done)	1.press class list page 2.navgate to schedule page 3. select specific class 4. record Presence and absence	The system must record attendance and absence	A failure message appears and asking To register again	Pass
	T-56-3	The teacher records attendance and absence. (error in data base)	1.press class list page 2.navgate to schedule page 3. select specific class 4. record Presence and absence	The system must record attendance and absence	A failure message appears	Pass

Table 131. Test Cases (Presence and absence)

57. Edit Presence and absence (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-57	T-57-1	The teacher edits attendance and absence.	1.press class list page 2.navgate to schedule page 3. select specific class 4. edits Presence and absence	The system must record attendance and absence	The system must record attendance and absence	Pass
	T-57-2	The teacher edits attendance and absence. (session done)	1.press class list page 2.navgate to schedule page 3. select specific class 4. edits Presence and absence	The system must record attendance and absence	A failure message appears and asking To register again	Pass
	T-57-3	The teacher edits attendance and absence. (error in data base)	1.press class list page 2.navgate to schedule page 3. select specific class 4. edits Presence and absence	The system must record attendance and absence	A failure message appears	Pass

Table 132. Test Cases (Edit Presence and absence)

58. Add school assignments (Teacher)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-58	T-58-1	Teacher wants to add school assignments	1.press to add assignment bottom 2.select class and section 3.set homework	Show a message that an assignment has been added	Show a message that an assignment has been added	Pass
	T-58-2	Teacher wants to add school assignments (wrong date)	1.press to add assignment bottom 2.select class and section 3.set homework	Show a message that an assignment has been added	Show a message that a wrong date	Pass
	T-58-3	Teacher wants to add school assignments (error in data base)	1.press to add assignment bottom 2.select class and section 3.set homework	Show a message that an assignment has been added	A failure message appears	Pass

Table 133. Test Cases (Add school assignments)

59. view school assignments (Student)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-59	T-59-1	Student wants to view school assignments	1.press to view assignment bottom 2.select homework	Show available assignments	Show available assignments	Pass
	T-59-2	Student wants to view school assignments (session done)	1.press to view assignment bottom 2.select homework	Show available assignments	A failure message appears	Pass

Table 134. Test Cases (view school assignments)

60. Student promotion (Employee)

Test Case ID	Test Case Number	Test Title	Test Steps	Expected Results	Actual Results	Pass / Fail
T-60	T-60-1	Promoting students from one class to the next	1.press promote student bottom 2.display classes and sections 3.select students 4.promote	A message appears confirming the students' promotion from one class to the next	A message appears confirming the students' promotion from one class to the next	Pass
	T-60-2	Promoting students from one class to the next (Conditions not met)	1.press promote student bottom 2.display classes and sections 3.select students 4.promote	A message appears confirming the students' promotion from one class to the next	A message appears stating that the student cannot be promoted.	Pass

Table 135. Test Cases (Student promotion)

61. Sign up

TestCase ID	TestCase Number	TestCase Name	Steps	Expected Result	Actual Result	Pass / Fail
T-61	T-61-1	Guardian sign up account (Valid credentials)	1.navgate to sign up bottom 2.Provide valid information 3.Click on sign up	Guardian should enter to Guardian page and save in DB	Guardian entered to Guardian page and save in DB	Pass
	T-61-2	Guardian sign up account (on fields at less Empty)	1.navgate to sign up bottom 2.one fields at less empty 3.Click on sign up	Guardian should be told incomplete fields	Guardian told incomplete fields And don't enter to Guardian page	Pass
	T-61-3	Guardian sign up account (some field is not correct)	1.navgate to sign up page 2. provide field wrong 3.Click on sign up	Guardian should be notified that some field is not correct and try again	Guardian should be notified that some field is not correct	Pass

Table 136. Test Cases (Sign up)

62. Login

TestCase ID	TestCase Number	TestCase Name	Steps	Expected Result	Actual Result	Pass / Fail
T-62	T-62-1	Guardian login account (Valid credentials)	1.navgate to login bottom 2.Provide valid information 3.Click on login	Guardian should enter to Guardian page	Guardian entered to Guardian page	Pass
	T-62-2	Guardian login account (on fields at less Empty)	1.navgate to login bottom 2.one fields at less empty 3.Click on login	Guardian should be told incomplete fields	Guardian told incomplete fields And don't enter to Guardian page	Pass
	T-62-3	Guardian login account (username or password is not correct)	1.navgate to sign in page 2. provide weak password 3.Click on login	Guardian should be notified that user name and password is not correct and try again	Guardian should be notified that user name and password is not correct	Pass

Table 137. Test Cases (log in)

63. View personal information

TestCase ID	TestCase Number	TestCase Name	Steps	Expected Result	Actual Result	Pass / Fail
T-63	T-63-1	Guardian view personal information	1.press bottom to see personal information 2.navgate to personal information page	Guardian should see his information	Guardian see his information	Pass
	T-63-2	Guardian view personal information (session done)	1.press bottom to see personal information	Guardian should see his information	A failure message appears and asking to register again	Pass
	T-63-3	Guardian view personal information (error in data base)	1.press bottom to see personal information	Guardian should see his information	A failure message appears	Pass

Table 138. Test Cases (View personal information)

64. Edit personal information

TestCase ID	TestCase Number	TestCase Name	Steps	Expected Result	Actual Result	Pass / Fail
T-64	T-64-1	Guardian edit personal information	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit 4.press Confirm button	Guardian should edit information and see massage to prove that	Guardian see his information	Pass
	T-64-2	Guardian edit personal information (session done)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Guardian should edit information and see massage to prove that	A failure message appears and asking to register again	Pass
	T-64-3	Guardian edit personal information (error in data base)	1.press bottom to see personal information 2.navgate to personal information page 3.press bottom to edit	Guardian should edit information and see massage to prove that	A failure message appears	Pass

Table 139. Test Cases (Edit personal information)

65. Log out

TestCase ID	TestCase Number	TestCase Name	Steps	Expected Result	Actual Result	Pass / Fail
T-65	T-65-1	Guardian log out	1.press bottom to log out 2.display login page	Guardian should log out and see log in page	Guardian log out and disconnect with data base	Pass

Table 140. Test Cases (Log out)

66. View academic file

TestCase ID	TestCase Number	TestCase Name	Steps	Expected Result	Actual Result	Pass / Fail
T-66	T-66-1	View Academic File (Single Student)	1 .Guardian logs into the system 2 .Selects "Academic File" 3. System shows student's subjects, grades, and attendance	Academic file details are displayed correctly	Academic file details are displayed	Pass
	T-66-2	View Academic File (Multiple Students)	1 .Guardian logs in 2 .Selects "Academic File" 3 .System shows list of students 4. Guardian chooses one student	Selected student's academic file is displayed	Correct student's file is displayed	Pass
	T-66-3	View Academic File (Grades Not Available)	1 .Guardian logs in 2 .Selects "Academic File" 3. System checks student data with missing grades	System shows message: "Grades are not available at the moment."	Message displayed as expected	Pass

Table 141. Test Cases (View academic file)

67. View financial file

TestCase ID	TestCase Number	TestCase Name	Steps	Expected Result	Actual Result	Pass / Fail
T-67	T-67-1	View Financial File – Single Student	1 .Guardian logs into the system 2 .Selects "Financial File" 3. Chooses student (if applicable)	System displays tuition fees, payments, and balances	Financial details are displayed	Pass
	T-67-2	View Financial File – Multiple Students	1 .Guardian logs in 2 .Selects "Financial File" 3 .System shows list of students 4. Guardian selects one	Financial file of the chosen student is displayed	Correct student's financial file shown	Pass
	T-67-3	No Payment Records Available	1 .Guardian logs in 2. Selects "Financial File" for a student with no payments	System displays "No payment records available."	Message displayed as expected	Pass
	T-67-4	Overdue Balances	1 .Guardian logs in 2. Selects "Financial File" for a student with overdue balances	System highlights overdue balances and displays reminder	Overdue balances highlighted	Pass

Table 142. Test Cases (View financial file)

ID	Title	type	SRS Section	Design	Coding	test cases
SCMS-1	Manager Login	functional	Analytical study:login	Sequence	code the requirment	T-1
SCMS-2	Manager View profile	functional	Analytical study:view-profile	Sequence	code the requirment	T-2
SCMS-3	Manager Edit profile	functional	Analytical study:edit-profile	Sequence	code the requirment	T-3
SCMS-4	Manager Show Teacher List	functional	Analytical study:show-list	Sequence	code the requirment	T-4
SCMS-5	Manager Add Teacher	functional	Analytical study:add-teacher	Sequence	code the requirment	T-5
SCMS-6	Manager Edit Teacher Enfo	functional	Analytical studt:edit-enformation	Sequence	code the requirment	T-6
SCMS-7	Manager Delete Teacher	functional	Analytical study:delete-teacher	Sequence	code the requirment	T-7
SCMS-8	Manager Logout	functional	Analytical study:logout	Sequence	code the requirment	T-8
SCMS-9	Manager Show Employee List	functional	Analytical study:show-list	Sequence	code the requirment	T-9
SCMS-10	Manager Add Employee	functional	Analytical study:add-employee	Sequence	code the requirment	T-10
SCMS-11	Manager Edit Employee Enfo	functional	Analytical study:edit-enformation	Sequence	code the requirment	T-11
SCMS-12	Manager Delete Employee	functional	Analytical study:delete employee	Sequence	code the requirment	T-12
SCMS-13	Search	functional	Analytical study:search	Sequence	code the requirment	T-13
SCMS-14	Create Manager Account	functional	Analytical study:new-account	Sequence	code the requirment	T-14
SCMS-15	Employee Login	functional	Analytical study:login	Sequence	code the requirment	T-15
SCMS-16	Employee View Profile	functional	Analytical study:view-profile	Sequence	code the requirment	T-16
SCMS-17	Employee Edit Profile	functional	Analytical study:edit-profile	Sequence	code the requirment	T-17
SCMS-18	Employee Logout	functional	Analytical study:logout	Sequence	code the requirment	T-18
SCMS-19	Employee Show Student List	functional	Analytical study:show-list	Sequence	code the requirment	T-19
SCMS-20	Employee Add Student	functional	Analytical study:add-student	Sequence	code the requirment	T-20
SCMS-21	Employee Edit Student Enfo	functional	Analytical study:edit-enformation	Sequence	code the requirment	T-21
SCMS-22	Employee Delete Student	functional	Analytical study:delete-student	Sequence	code the requirment	T-22
SCMS-23	Employee Create Class	functional	Analytical study:create-class	Sequence	code the requirment	T-23
SCMS-24	Employee Edit Class Enfo	functional	Analytical study:edit-class	Sequence	code the requirment	T-24
SCMS-25	Employee Delete Class	functional	Analytical study:delete-class	Sequence	code the requirment	T-25
SCMS-26	Employee Create Division	functional	Analytical study:create-division	Sequence	code the requirment	T-26
SCMS-27	Employee Edit Division Enfo	functional	Analytical study:edit-division	Sequence	code the requirment	T-27
SCMS-28	Employee Delete Division	functional	Analytical study:delete-division	Sequence	code the requirment	T-28
SCMS-29	EmployeeAddStudentToAcademic	functional	Analytical study	Sequence	code the requirment	T-29
SCMS-30	Transferring a student to another division	functional	Analytical study	Sequence	code the requirment	T-30
SCMS-31	Employee Create an exam schedule	functional	Analytical study:edit-exam	Sequence	code the requirment	T-31
SCMS-32	Employee View exam schedule	functional	Analytical study:view-exam	Sequence	code the requirment	T-32
SCMS-33	Employee Edit exam schedule	functional	Analytical study:edit-exam	Sequence	code the requirment	T-33
SCMS-34	Employee Delete exam schedule	functional	Analytical study:Delete-exam	Sequence	code the requirment	T-34
SCMS-35	Employee Add grades	functional	Analytical study:Add grades	Sequence	code the requirment	T-35
SCMS-36	Employee View grades	functional	Analytical study:View grades	Sequence	code the requirment	T-36
SCMS-37	Employee Edit grades	functional	Analytical study:Edit grades	Sequence	code the requirment	T-37
SCMS-38	Employee Delete grades	functional	Analytical study:Delete grades	Sequence	code the requirment	T-38
SCMS-39	Employee Create schedule	functional	Analytical study:Create schedule	Sequence	code the requirment	T-39
SCMS-40	Employee Edit schedule	functional	Analytical study:Edit schedule	Sequence	code the requirment	T-40
SCMS-41	Employee Delete schedule	functional	Analytical study:Delete schedule	Sequence	code the requirment	T-41
SCMS-42	Employee View schedule	functional	Analytical study:View schedule	Sequence	code the requirment	T-42
SCMS-43	Student Login	functional	Analytical study:Login	Sequence	code the requirment	T-43
SCMS-44	Student Logout	functional	Analytical study:Logout	Sequence	code the requirment	T-44
SCMS-45	Student View profile	functional	Analytical study:View profile	Sequence	code the requirment	T-45
SCMS-46	Student Edit Profile	functional	Analytical study:Edit Profile	Sequence	code the requirment	T-46
SCMS-47	Student View Grade	functional	Analytical study:View Grade	Sequence	code the requirment	T-47
SCMS-48	Student View Exam Schedule	functional	Analytical study:View Exam	Sequence	code the requirment	T-48
SCMS-49	Student View Schedule	functional	Analytical study:View Schedule	Sequence	code the requirment	T-49
SCMS-50	Student View Absences And Lineage	functional	Analytical study:	Sequence	code the requirment	T-50
SCMS-51	Teacher Login	functional	Analytical study:Login	Sequence	code the requirment	T-51
SCMS-52	Teacher Logout	functional	Analytical study:Logout	Sequence	code the requirment	T-52
SCMS-53	Teacher View Profile	functional	Analytical study:View Profile	Sequence	code the requirment	T-53
SCMS-54	Teacher Edit Profile	functional	Analytical study:Edit Profile	Sequence	code the requirment	T-54
SCMS-55	Teacher View Schedule	functional	Analytical study:View Schedule	Sequence	code the requirment	T-55
SCMS-56	Teacher Presence and Absence	functional	Analytical study:	Sequence	code the requirment	T-56
SCMS-57	Teacher Edit presence and absence	functional	Analytical study	Sequence	code the requirment	T-57
SCMS-58	Techer Add School Assignment	functional	Analytical study	Sequence	code the requirment	T-58
SCMS-59	Student View School Assignments	functional	Analytical study	Sequence	code the requirment	T-59
SCMS-60	Employee promote Student	functional	Analytical study	Sequence	code the requirment	T-60

Figure 156. Requirements Traceability Matrix(RTM)

7: CONCLUSION AND FUTURE WORK

Conclusion and Future Work:

7.1Conclusion

These days, in light of the technological advancement we are experiencing, the traditional. Using programming and technology, we can abandon the old way and create a much better way of it. People today also prefer to use web applications, because they like the most dynamic, easy and time-saving way, and we took all the above-mentioned points into consideration while working on the project, which provides a platform for automating school administration in all its departments and appointing teachers and employees, in addition to adding students. It allows communication between the student, teacher, and parent, as well as organizing school affairs efficiently and easily using simple and easy-to-use interfaces

7.2Future Work

Guardian

- **Oversight and Well-being:** Regularly monitor the progress and well-being of the entity or individual under their guardianship, ensuring all needs are met.
- **Decision-Making:** Make informed and timely decisions regarding critical matters, always prioritizing the best interests of the ward.
- **Communication & Collaboration:** Maintain open and effective communication with all relevant parties, including managers, financial employees, and other stakeholders, to ensure alignment and address concerns promptly.
- **Compliance:** Ensure adherence to all legal, ethical, and regulatory requirements related to the guardianship.
- **Resource Management:** Oversee the appropriate allocation and utilization of resources dedicated to the ward's care or development.

Financial Employee

- **Financial Planning & Budgeting:** Develop and maintain comprehensive financial plans and budgets, forecasting future needs and ensuring fiscal responsibility.
- **Reporting & Analysis:** Generate accurate and timely financial reports, analyze performance against budgets, and provide insights for decision-making.
- **Compliance & Audit:** Ensure strict adherence to all financial regulations, internal policies, and tax laws. Prepare for and facilitate internal and external audits.
- **Cash Flow Management:** Monitor and manage cash flow effectively to ensure liquidity and optimize financial resources.
- **Risk Management:** Identify and mitigate financial risks, implementing strategies to protect assets and ensure long-term financial stability.

Requirements ID	Requirements Description	Status (wait/done)
g-1	Send a medical report	Wait
g-2	View absent percent	Wait
g-3	View lecture table	Wait
g-4	View exam table	Wait
g-5	View grades	Wait
g-6	Add payment	Wait
g-7	Request papers for the student	Wait

Table 143. Functional Requriements (Guardian)

Requirements ID	Requirements Description	Status (wait/done)
f-1	Manage (View/Add/Edit) Student Fees	Wait
f-2	Issue Invoices and Receipts	Wait
f-3	Track Outstanding Student Balances	Wait
f-4	Process and Review Refunds	Wait
f-5	Generate Financial Reports	Wait
f-6	Send a medical report	Wait
f-7	Manage (View/Add/Edit) Expense Records	Wait
f-8	Manage (View/Add/Edit) Staff Salaries	Wait
f-9	Manage Scholarships and Financial Aid	Wait
f-10	Budget Preparation and Monitoring	Wait
f-11	Log In	Wait
f-12	View Personal Information	Wait
f-13	Edit Personal Information	Wait
f-14	Log Out	Wait

Table 145. Functional Requirements (Financial Employee)

7.3REFERANCE

- **Wikipedia:**
- **Bootstrap:**
- **jQuery:**
- **Font Awesome**
- **Php:**
- **W3shoole**
- **Stack Overflow**
- **Geeks For Geeks:**
- **UML:**
- **Microsoft:**