COLLEGE PORTAL SYSTEM

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BS Software Engineering

Department of Software Engineering

Capital University of Science & Technology, Islamabad

Submission Form for Final-Year

PROJECT REPORT

Version	2.0
NUMBER OF MEMBERS	02
TITLE	College Portal system
SUPERVISOR NAME	Ms. Aziya Mehboob

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MEMBERS' SIGNATURES

Supervisor's Signature

APPROVAL CERTIFICATE

This project, entitled as “College Portal System” has been approved for the award of

Bachelors of Science in Software Engineering

Committee Signatures:

Supervisor: _____

(Ms. Aziya Mehboob)

Project Coordinator: _____

(Mr. Ibrar Arshad)

Head of Department: _____

(Dr. Nadeem Anjum)

DECLARATION

I/We, hereby, declare that “No portion of the work referred to, in this project has been submitted in support of an application for another degree or qualification of this or any other university/institute or other institution of learning”. It is further declared that this undergraduate project, neither as a whole nor as a part thereof has been copied out from any sources, wherever references have been provided.

MEMBERS’ SIGNATURES

ACKNOWLEDGEMENTS

Our first and sincerest appreciation goes to Almighty Allah. Indeed, he has been our strength, provider and wisdom. His special grace has brought us this far and we are very grateful to him. We pay our humble appreciation from the core of our heart to Holy Prophet Hazrat Muhammad (Peace Be upon Him), who is forever a model of guidance and minaret of knowledge for humanity. If the words are considered as symbols of approval and tokens of acknowledgment, then let the words play the heralding role of expressing our gratitude. Our deep sense of gratitude to our supervisor, Ms. Aziya Mehboob, whose encouragement, guidance and support from the initial to the final level enabled us to develop this project.

DEDICATION

THIS DISSERTATION IS DEDICATED

TO ALLAH ALMIGHTY

AND

THE HOLY PROPHET HAZRAT MUHAMMAD

(Peace be upon him)

TO

THE UNFAITHFOMABLE DEPTHS OF LOVE AND EVER

STRENGHENING

PRAYERS OF OUR BELOVED

PARENTS TO OUR

HUMBLE TEACHER MS. Aziya Mehboob

Executive Summary

In the project report entitled as “college portal system: Build your own PC” we have developed an college portal system website .This Project is based on Web Development, and is developed with the help of different tools and technologies. The development of this website includes both frontend and backend development. We have provided an interactive and friendly interface to purchase a school as well as we have managed all the databases of the project. The tools & technologies that are being used for the project development are; PHP, JavaScript, HTML, CSS, Bootstrap, Microsoft SQL Server and Microsoft Visual Studio.

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Chapter 1

INTRODUCTION

College Portal will automate the manual work of any education system. College Portal is a web-based application. The College Portal is one of the best ways to incorporate the latest technology, Parents, Students, Teachers and Administrators use the system to share information about Attendance, sports events, Timetable, Grade card educational strategies academic as well as non-academic performance**.**

1.1.PROJECT INTRODUCTION

- College Portal software fills the communication gap between parents, teachers, and students. With the system, they all can stay connected and get instant updates. The college portal software is a blessing for working parents who usually do not get time to visit the educational institutes frequently.
- This college portal gives them real-time updates about their child's performance at school. Moreover, in the case of emergency or announcing alert, this system facilitates quick reach via email notifications. Likewise, students can use this software to solve their doubts or queries.
- As the web-based College Portal helps to save time and resources, the educational institutes can focus on quality education. With the system, they do not have to spend more time on paperwork or manually pass on any important messages, so the saved time & energy will be a great source offer high-grade educational services.
- College Portal is a powerful educational system with all backend administration functions of the educational institute and administration, parents, teachers and students on a common interactive platform. It significantly reduces staff time spent on administrative tasks, also helpsto improve data consistency and efficiency.
- All the details regarding education and events, whether it is small or big, will be online.
- It is simply can be done online on the system, and can be forwarded to the students and their parents.
- In today's rush hour of life, it is difficult for a parent to go to the college, school of his / her child every time a teacher call. With this smart education system, it will easier for a parent and a teacher to be in touch every day. As a matter of fact, it will be easier for each

individual person who is associated with the system to be in touch as needed.

- A database server is required to store all the data and manage all the data. Upon the web request of user, we need to store their profile information, their order information and their previous orders so far. Similarly, for the specification we need to manage all the available features of College Portal to present to the user so they can choose their desired feature.

- There are many other web applications for student monitoring system but the problem is, those school-based web applications are not providing direct virtual communication of parent to teacher like we are providing for this platform, we send all record of student to parents (Report card, attendance on parent portal) and notify every week for update of student to parents.

1.2.SYSTEM MODULES

1.2.1. Admin

Admin is the one who controls the whole College Portal, every other person or thing that is associated with the college.

- Admin is be able to register teachers, students and parents
- Admin is be able to view the profile of all user in the system.
- Assigning the timetable to teachers and the students should be admin's responsibility.
- Admin is be able send notice to teacher, student, and parent regarding sports events and other.
- Admin is be able chat with all users.

1.2.2. Teacher

The teacher is one of the important entities for an education. The teachers are there to teach the students. The following are the features that will be available to the teachers.

1 Teachers is able to mark the Attendance of student.
2 Teachers is able to view Profile of students.
3 Teachers shall be able to view Notifications of all category.
4 Teachers shall be able to create Student Grade Card.
5 Teacher will be able to send Notification to students.
6 Teacher will be able chat with parent, student, and admin.

1.2.3. Parent

It is important for the parent to be familiar with the status of their child. They can monitor the daily activity. They will be able to:

2. Parent shall be able to view the Grade Card.
3. Parent shall be able to view the Attendance.
4. Parent shall be able to view the timetable.
5. Parent shall be able to view the announcement, important notification.
6. Parent shall be able to view the teacher's profile.
7. Parent shall be able to view subject details.
8. Parent shall be able chat with teacher and admin.

1.2.4. Student

It is important for the Student to be familiar with the status of their study. They can monitor the daily activity of their college. They will be able to:

1. Student will be able to view the Grade Card.
2. Student will be able to view the Attendance.
3. Student will be able to view the timetable.
4. Student will be able to view the announcement, important notification.
5. Student will be able to view the teacher's profile.
6. Student will be able to view subject details.
7. Students shall be able to chat with teachers and admin.

1.3. Existing Examples / Solutions

1.3.1. College Management System

This web-based college management system manages and streamlines all aspects of college administration.

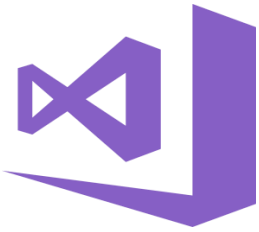
- Academic Setup.
- Student, Staff Management.
- Account Management.
- Certificate Template and Issue.
- Hostel Management.

- Library Management.
- Transport Management

1.4. Business Scope

College portal system that both student and teachers play an important role in learning, environment and wellbeing, and that generally do better when there are positive connections between the different spaces they learn in education. College Portal provides all features. Useful Tools and Technologies. Any pandemic (like covid-19) or in any emergency situation, College portal will be able to provide ease to everyone who is connected to it.

1.5. Tools and Technologies

Tools and Technologies	Explanation
Visual Studio 	Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms.
HTML 	HTML5 is a markup language used for structuring and presenting content on the World Wide Web. It is the fifth and latest major version of HTML that is a World Wide Web Consortium

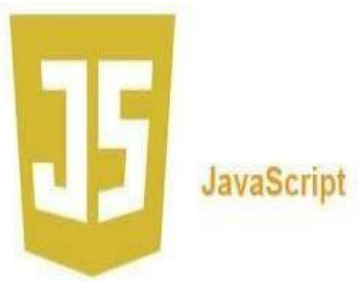
JavaScript 	A lightweight scripting language which follows all the programming language fundamentals e.g. data types, control statements, loops, overloading, etc. Used to make web pages' interactive Insert dynamic text into HTML React to events (ex: page load, customer click) Get information about a customer's computer (ex: browser type, version, etc.) Perform
PHP 	PHP is a general-purpose scripting language especially suited to web development. PHP code is usually processed on a web server by a PHP interpreter implemented asa module. We have used this for our crawler.

Figure 1.5 Tools & Technology

1.6. Project Time Line

Here is the estimation of work progression throughout the project

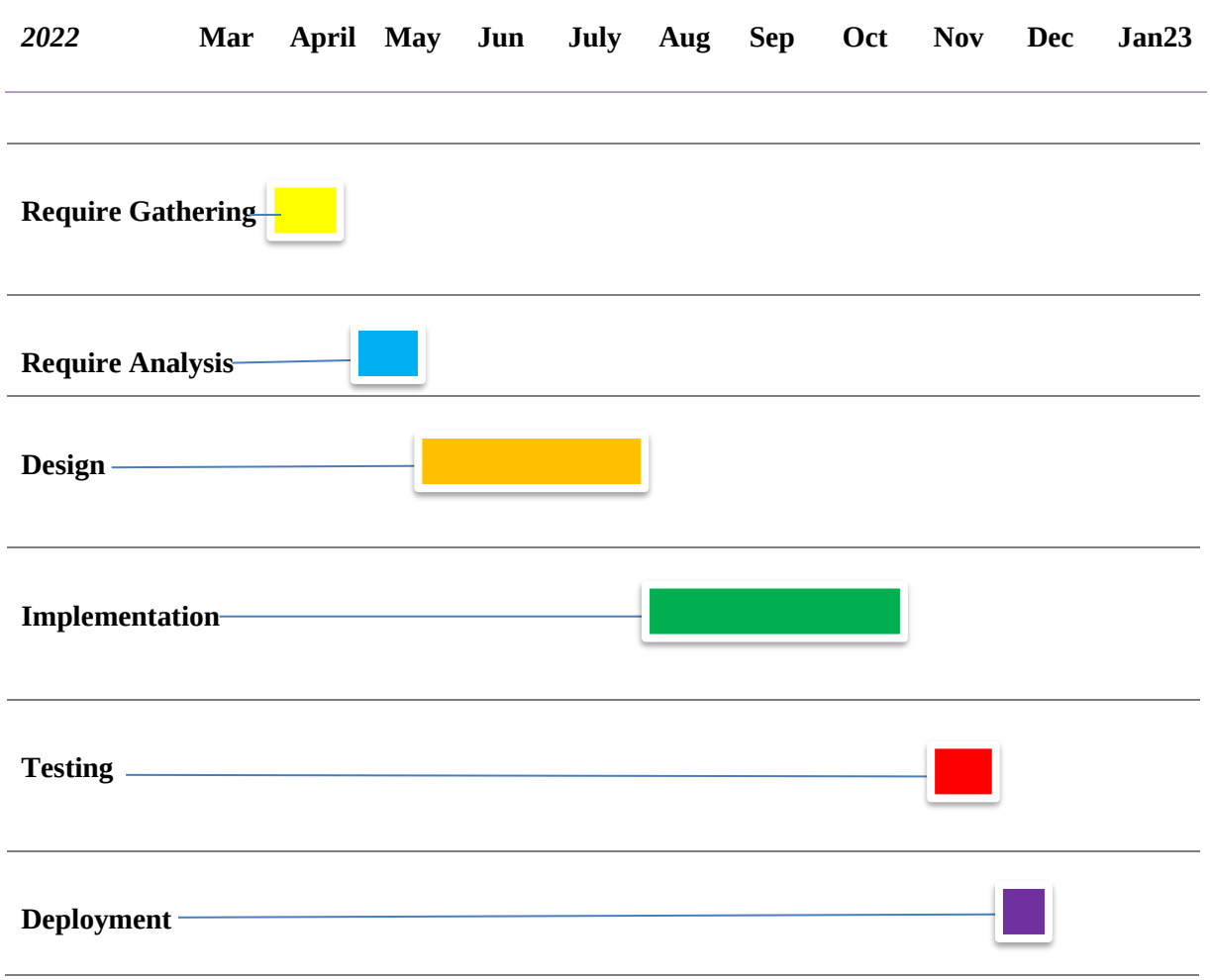


Figure 1.6 Gant chart

Chapter 2

2. Requirement Specification and Analysis

2.1. Functional Requirements

This chapter includes use case diagram, use case description and system sequence diagrams for the requirements selected/revised in the current iteration.

2.1.1 Admin

Table 2.1.1 Admin Functional Requirements

S. No.	Functional Requirement	Type	Status
1	Admin will be able to login the system	Core	Complete
2	Admin will be able to register teacher, student and parents	Core	Complete
3	Admin will be able generate timetable of student	Core	Complete
4	Admin will be able to view profile ofparent, teacher, student	Core	Complete
5	Admin will be able to create a notification about important notice or other announcement	Core	Complete
6	Admin will be able to chat with student, parent and teacher	Core	Complete

2.1.2. Teacher

Table 2.1.2 Teacher Functional Requirements

S. No.	Functional Requirement	Type	Status
1	Teacher would be able to login the system	Core	Complete
2	Teacher would be able to generate Result card ofstudents	Core	Complete
3	Teacher would be able to mark attendance of students	Core	Complete
4	Teacher would be able to view profile of parents and students.	Core	Complete
5	Teacher would be able to chat with student, parent and admin	Core	Complete
6	Teacher would be able to view the notifications.	Core	Complete

2.1.3. Parent

Table 2.1.3 Parent Functional Requirement

S. No.	Functional Requirement	Type	Status
1	Parent shall be able to log into system	Core	Complete
3	Parent shall be able to view timetable of child	Core	Complete
4	Parent shall be able to view attendance report of child	Core	Complete
5	Parent shall be able to view the Result card of the child	Core	Complete
6	Parent shall be able to view teacher and child profile	Core	Complete
7	Parent shall be able to view the announcement,important notice	Core	Complete
8	Parent shall be able to chat with teacher and admin	Core	Complete

2.1.4 Student

Table 2.1.4 Student Functional Requirement

S. No.	Functional Requirement	Type	Status
1	Student shall be able to login into system	Core	Complete
3	Student shall be able to view timetable	Core	Complete
4	Student shall be able to view attendance report	Core	Complete
5	Student shall be able to view the Result card.	Core	Complete
6	Student shall be able to view teacher profile	Core	Complete
7	Student shall be able to view the announcement,important notice	Core	Complete
8	Student shall be able to apply for leave application	Core	Complete

2.2. Non-Functional Requirements

Table 2.2 Non Functional Requirements

S. No.	Non-Functional Requirement	category
1	The system should give possible suggestions if the user enters wronginput.	Usability
2	The system should keep and retrieve record correctly.	Reliability
3	The software protects sensitive data and allows only authorized access to the data.	Security
4	The software constantly performs certain functions without any failure.	Reliability

2.3. Admin Use Case Model

Use case model is a list of actions or event steps, typically defining the interactions between a role (known in the Unified Modeling Language as an actor) and a system, to achieve a goal. The actor can be a human or other external system. Use cases for our project college portal system is as follows.

Our Actor:

- **Admin**

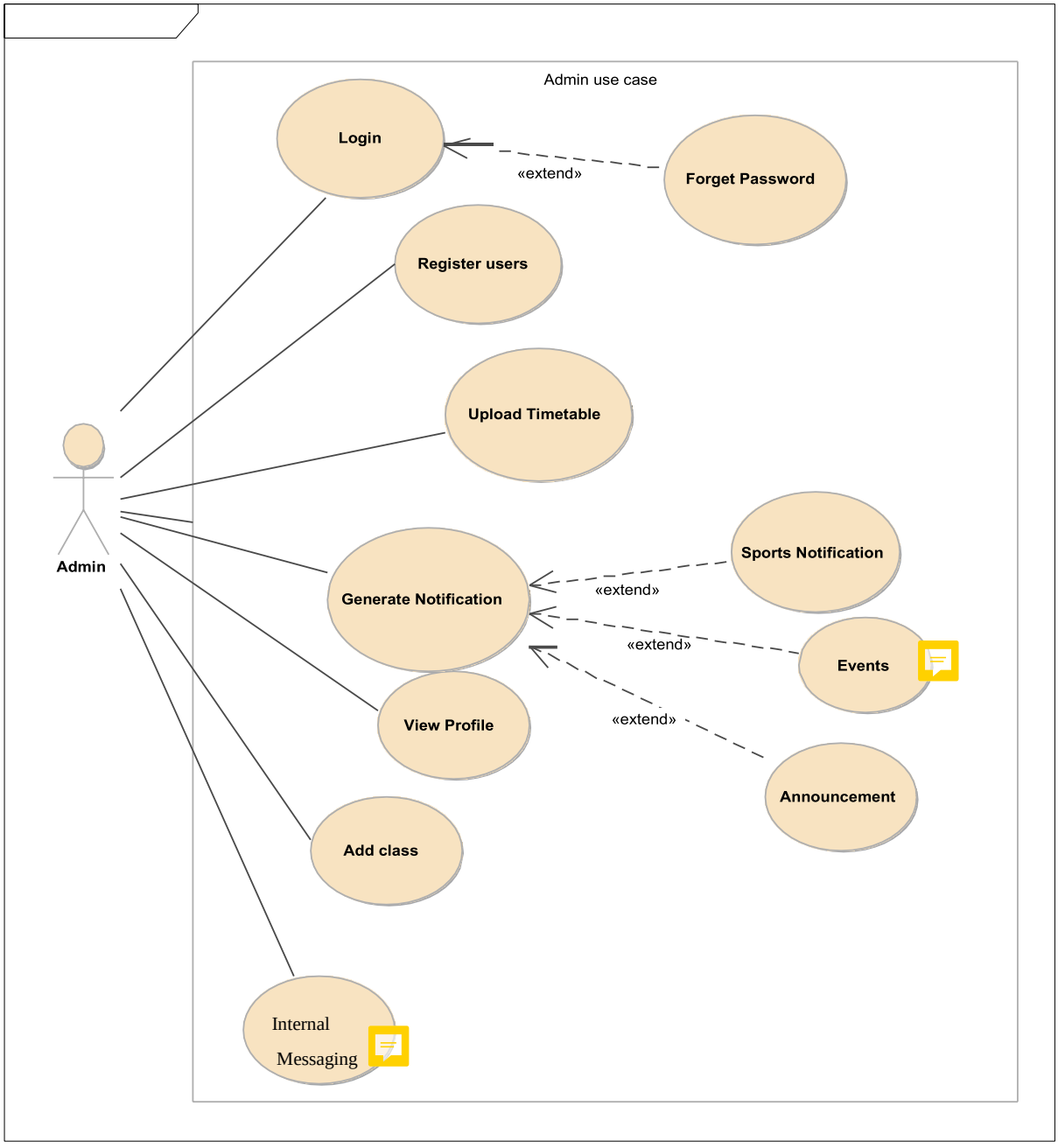


Figure 2.3 Admin Use case diagram

2.4. Admin Use Case Description:

A use case description is a text-based narrative of a functionality comprised of detailed, step-by-step interaction between the actor and the system.

2.4.1 Admin Login:

It is a use case description table that explains how admin register‘s themselves into the system with complete steps. It also provides exceptions, alternate flow if exist and details about its occurring conditions.

Table 2.4.1 Admin Login use case description

Use Case ID:	Uc2		
Use Case Name:	Login		
Created By:	Tabish rafique	**Last Updated By:**	04-04-2022
Date Created:	04-04-2022	**Last Revision Date:**	04-04-2022
Actors:	Admin		
Description:	Admin can login to the system by providing username, password activities.		
Trigger:	Login button		
Preconditions:	Admin must be register in system		
Post conditions:	Admin successfully login to the system.		
Normal Flow:	Admin	System	
	Request for Login	Display Login Page	
	Login (Username, Password)	Login Successful	
Exceptions:	Database is not responding If admin is not registered in the system then the system is not responding.		

2.4.2. Register users

In this use case, Admin will be able to register users. He will be able to add users into the system.

Table 2.4.2 Admin Register user use case description

Use Case ID:	Uc1		
Use Case Name:	Register users		
Created By:	Tabish Rafique	**Last Updated By:**	04-04-2022
Date Created:	04-04-2022	**Last Revision Date:**	04-04-2022
Actors:	Admin		
Description:	Admin can register to the system by providing all details.		
Trigger:	Click on registered button.		
Preconditions:	Admin must be login in the system.		
Post conditions:	Registered users successfully.		
Normal Flow:	Actor	System	
	Admin will select the registration option	Registration form will be displayed to Admin.	
	user (teacher, student,)	Selected user display page	
	Admin will provide details and click on submit button.	System will save Admin information and displays registered successfully.	
Alternative flow	In case the system gets stuck, Admin will re-register him/herself.		
Exceptions:	Database is not responding		
	Admin is not registered in the system. System is not responding.		

2.4.3. Generate Notification

In this use case, Admin will be able to generate notification. He will be able to generate notification into the system.

Table 2.4.3 Admin Generate Notification use case description

Use Case ID:	Uc3		
Use Case Name:	Generate Notification		
Created By:	Tabish rafique	**Last Updated By:**	04-04-2022
Date Created:	04-04-2022	**Last Revision Date:**	04-04-2022
Actors:	Admin		
Description:	Admin notify all the users about announcement and important notices.		
Trigger:	Button		
Preconditions:	Admin must login into system.		
Post conditions:	Admin notify the important notice, event to the users.		
Normal Flow:	Admin	System	
	Request to generate notification	Display page of notification	
	Enter Notification details(TitleName, description, Date)	Successfully generated notification	
Exceptions:	Database is not responding Admin is not registered in the system. System is not responding.		

2.4.4. Generate Timetable

In this use case, Admin will be able to generate timetable. He will be able to generate timetable of student into the system.

Table 2.4.4 Admin Generate timetable use case description

Use Case ID:	Uc4		
Use Case Name:	Upload timetable		
Created By:	Tabish Rafique	**Last Updated By:**	05-04-2022
Date Created:	05-04-2022	**Last Revision Date:**	05-04-2022
Actors:	Admin		
Description:	Admin can generate students timetable		
Trigger:	Upload timetable button		
Preconditions:	Admin must login into the system.		
Post conditions:	Admin can generate timetable activity		
Normal Flow:	**Admin**	**System**	
	Request to upload timetable	Display all Grade	
	Select (class)	Display form of timetable	
	Enter TimetableDetail(teacherid, subjectid, time, venue, day)	Successfully generated	
Exceptions:	Database is not responding Admin is not registered in the system. System is not responding.		

2.4.5. View Profile

In this use case, Admin will be able to view the profile of users .This operation will open the user profile.

Table 2.4.5 Admin View Profile use case description

Use Case ID:	Uc5		
Use Case Name:	View Profile		
Created By:	Tabish Rafique	**Last Updated By:**	05-04-2022
Date Created:	05-04-2022	**Last Revision Date:**	05-04-2022
Actors:	Admin		
Description:	Admin can view profile of teacher, parent, student		
Trigger:	Profile Button		
Preconditions:	Admin must be Login into the system		
Post conditions:	Admin can check profile of users.		
Normal Flow:	**Admin**	**System**	
	Admin can view the profile of users	Display page select user.	
	Profile (teacher, parent, student)	View profile Successfully	
Exceptions:	Database is not responding Admin is not registered in the system. System is not responding.		

2.4.6. Add Class

In this use case Admin will be able add new class. He will be able to add new class into the system.

Table 2.4.6 Admin Add Grade use case description

Use Case ID:	Uc6		
Use Case Name:	Add class		
Created By:	Tabish Rafique	**Last Updated By:**	05-04-2022
Date Created:	05-04-2022	**Last Revision Date:**	05-04-2022
Actors:	Admin		
Description:	Admin can create new class (className)		
Trigger:	Add class		
Preconditions:	Admin must login into the system.		
Post conditions:	Admin can generate add class activity		
Normal Flow:	**Admin**	**System**	
	Request for add new class	Display and please fill form	
	Grade(name, teacherId)	Successfully generated	
Exceptions:	Database is not responding Admin is not registered in the system. System is not responding.		

2.4.7. Internal Messaging

In this use case Admin will be able to chat with users.

Table 2.4.7 Admin Chat use case description

Use Case ID:	Uc6		
Use Case Name:	Internal Messaging		
Created By:	Tabish Rafique	**Last Updated By:**	05-04-2022
Date Created:	05-04-2022	**Last Revision Date:**	05-04-2022
Actors:	Admin		
Description:	Admin can chat with users		
Trigger:	Add Chat		
Preconditions:	Admin must login into the system.		
Post conditions:	Admin can chat with user successfully		
Normal Flow:	**Admin**	**System**	
	Request for chat	Display user	
	Select user	Show chat box	
	Enter message then sent	Successfully chat with user	
Exceptions:	Database is not responding Admin is not registered in the system. System is not responding.		

2.5. Admin System Sequence diagrams

System sequence diagram (SSD) is a sequence diagram that shows, for a particular scenario of a use case, the events that external.

2.5.1. Login:

This is system sequence diagram which illustrates the flow of Admin login to system and communication between Admin and system with abstract level details. Admin send request by clicking on button and system interact with database and respond according to request and data provided where necessary

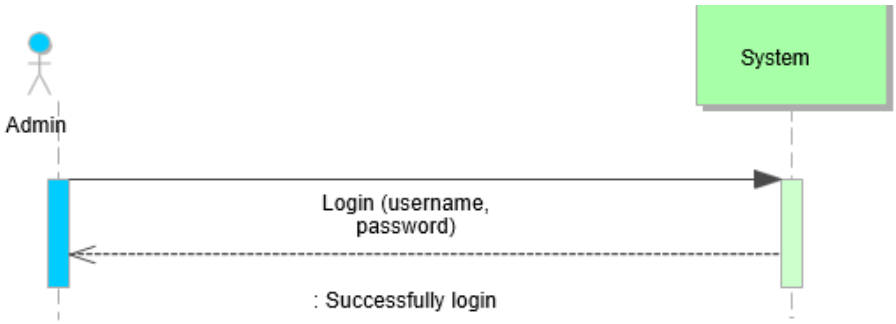


Figure 2.5.1 Admin login

2.5.2. Generate Notification

This is system sequence diagram which illustrates the flow of Admin Generate notification and communication between Admin and system with abstract level details. Admin send request by clicking on button and system interact with database and respond according to request and data provided where necessary

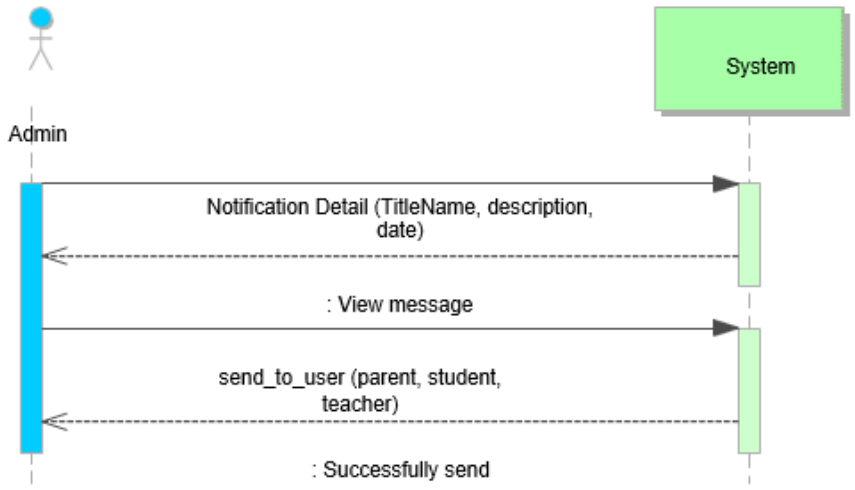


Figure 2.5.2 Admin Generate notification

2.5.3. Register users

This is system sequence diagram which illustrates the flow of Admin register user's to system and communication between Admin and system with abstract level details. Admin send request by clicking on button and system interact with database and respond according to request and data provided where necessary

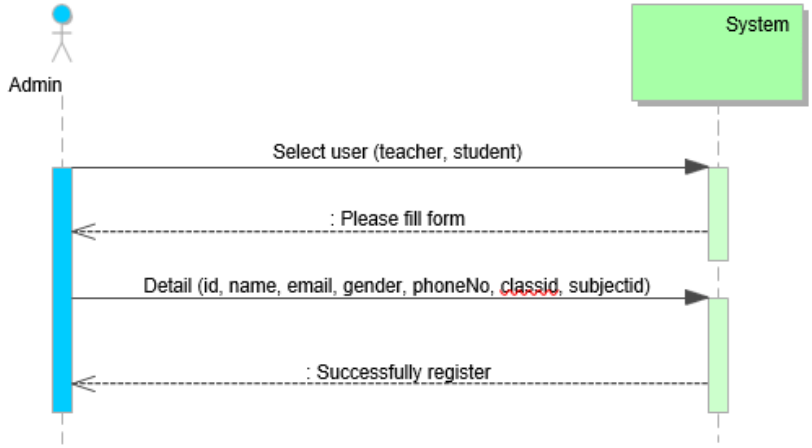


Figure 2.5.3 Admin register users

2.5.4. Generate Timetable

This is system sequence diagram which illustrates the flow of Admin Generate timetable and communication between Admin and system with abstract level details. Admin send request by clicking on button and system interact with database and respond according to request and data provided where necessary

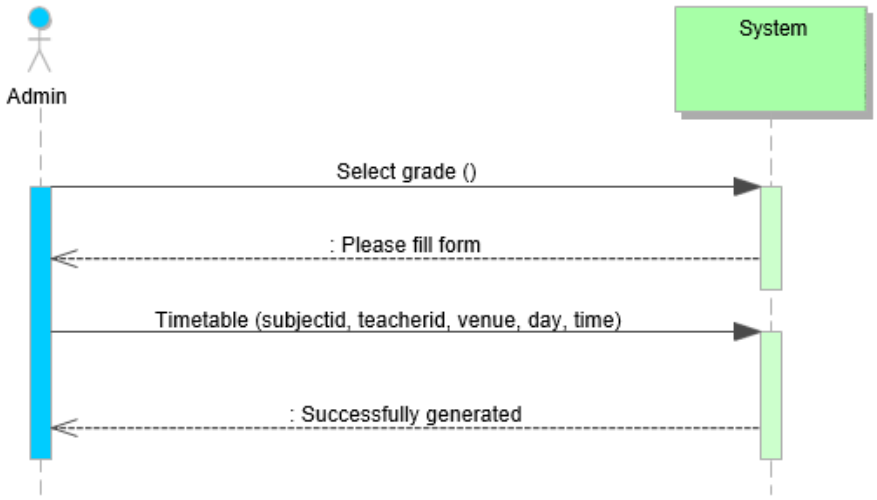


Figure 2.5.4 Admin generate timetable

2.5.5. View Profile

This is system sequence diagram which illustrates the flow of Admin view profile of user's and communication between Admin and system with abstract level details. Admin send request by clicking on button and system interact with database and respond according to request and data provided where necessary

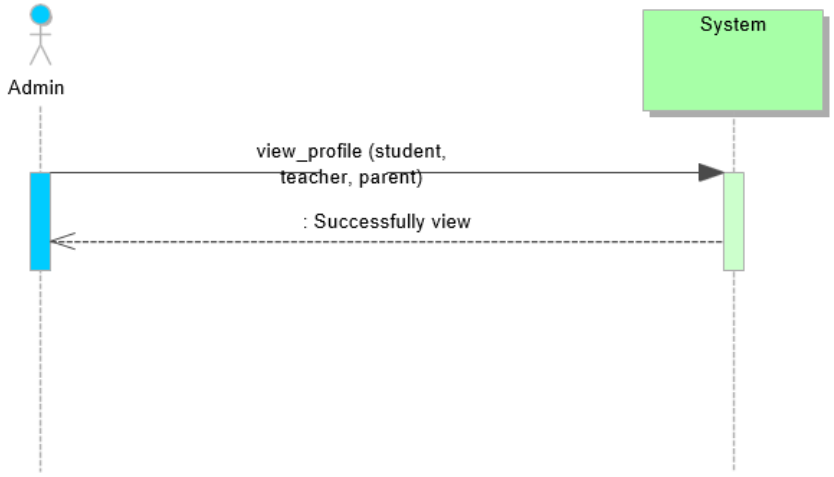


Figure 2.5.5 Admin view profile

2.5.6. Add Class

This is system sequence diagram which illustrates the flow of Admin add new class and communication between Admin and system with abstract level details. Admin send request by clicking on button and system interact with database and respond according to request and data provided where necessary

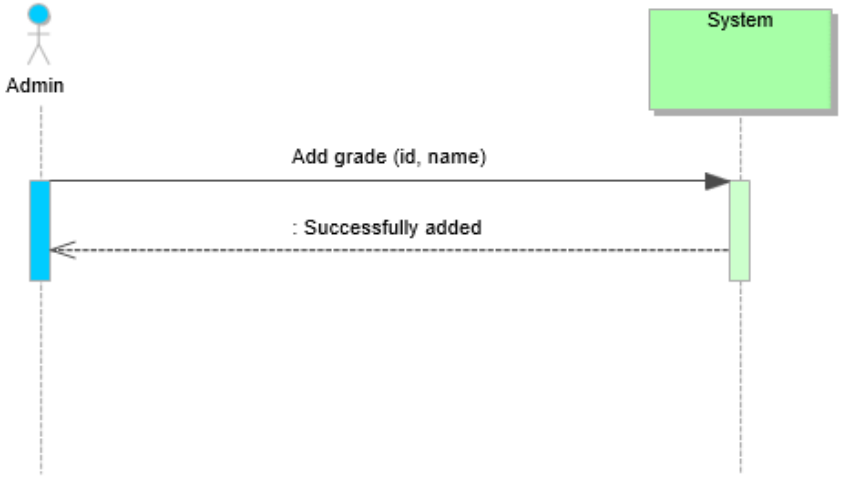


Figure 2.5.6 Admin add class

2.5.7. Internal Messaging:

This is system sequence diagram which illustrates the flow of Admin Chat and communication between Admin and system with abstract level details.

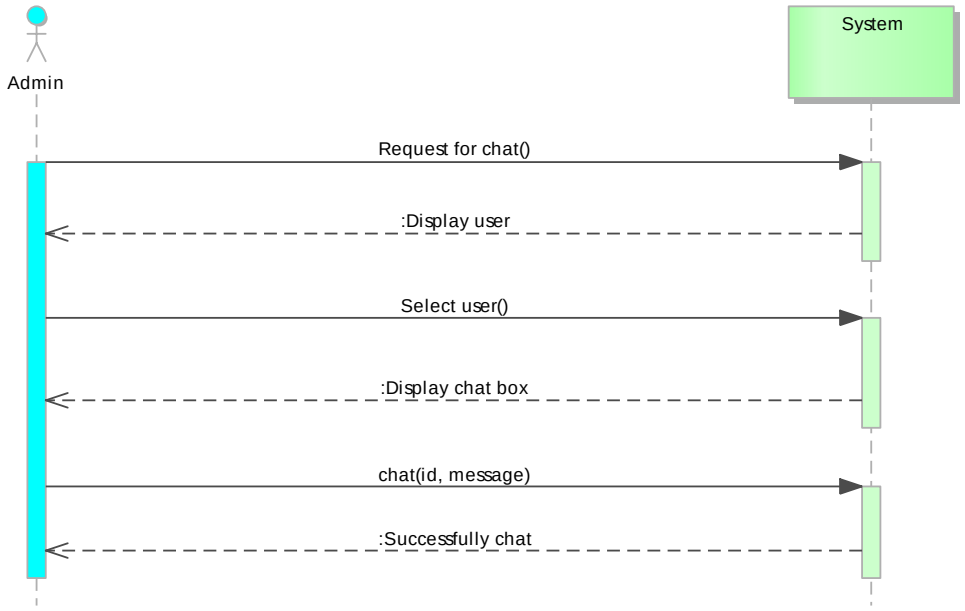


Figure 2.5.7 Admin add grade

2.6. Teacher Use Case Model

This is our Teacher Use Case developed on functional requirements. It display show the teacher interacts with the system.

Use cases:

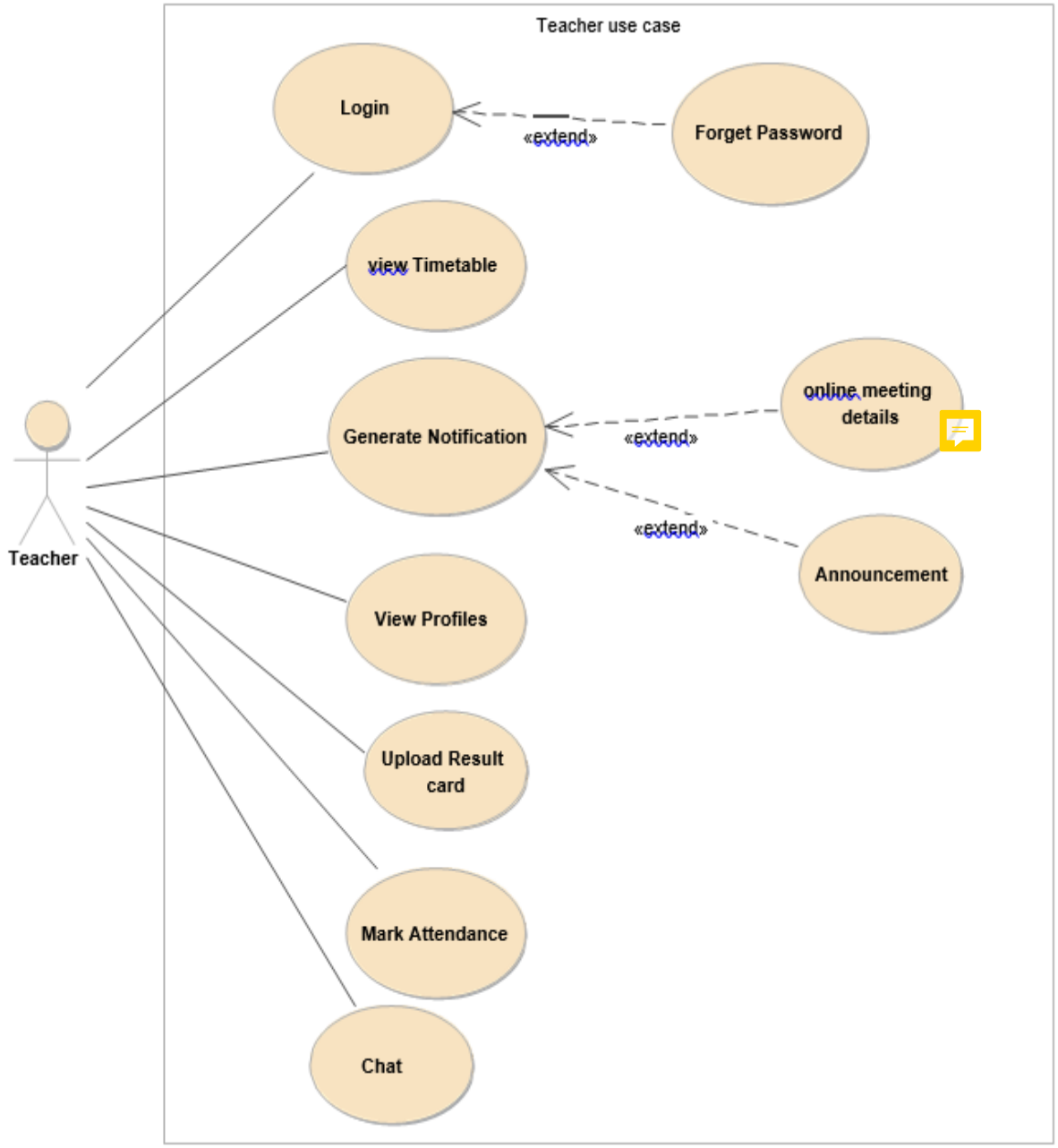


Figure 2.6 Use case Teacher

2.7. Teacher Use Case Description:

2.7.1 Teacher Login:

It is a use case description contains the functionality of Techer login in to the system. Teacher will provide the correct username and password for successful logging into the system. If the username is not correct, then the login into the system will not be performed

Table 2.7.1 Teacher Login use case description

Use Case ID:	Uc1		
Use Case Name:	Login		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Teacher		
Description:	Teacher can login to the system by providing username, password activities.		
Trigger:	Login button		
Preconditions:	Teacher must be register to system.		
Post conditions:	Teacher successfully login to the system.		
Normal Flow:	Teacher	System	
	Request for Login	Display Login Page	
	Login (Username, Password)	Login Successful	
Exceptions:	Database is not responding If teacher is not registered in the system then the system is not responding.		

2.7.2 Generate Result Card

In this use case, Teacher will be able to generate result card. He/she will be able to generate result card of student into the system.

Table 2.7.2 Teacher Generate Result Card use case description

Use Case ID:	Uc2		
Use Case Name:	**Upload Result card**		
Created By:	Tabish rafique	**Last Updated By:**	
Date Created:	04/04/2022	**Last Revision Date:**	
Actors:	Teacher		
Description:	Teacher is able to generate student result card		
Trigger:	Generate result card button		
Preconditions:	Teacher must be login to the system. Teacher must click generate result card button.		
Post conditions:	Teacher is able to generate student result card activity		
Normal Flow:	**Teacher**	**System**	
	Request to generate Result card	Display form	
	Resultcard (studentid, marks, dataofyear, className, examName)	Successfully generated	
Exceptions:	Database is not responding Teacher is not registered in the system. System is not responding.		

2.7.3 Mark Attendance

In this use case, Teacher will be able to mark attendance. He/she will be able to mark attendance card of student into the system.

Table 2.7.3 Teacher Mark attendance use case description

Use Case ID:	Uc3		
Use Case Name:	Mark attendance		
Created By:	Tabish rafique	**Last Updated By:**	
Date Created:	04/05/2022	**Last Revision Date:**	
Actors:	Teacher		
Description:	Teacher is able to Mark attendance		
Trigger:	Attendance button		
Preconditions:	Teacher must be login to the system. Teacher must click Attendance button.		
Post conditions:	Teacher is able to Mark attendance activity		
Normal Flow:	**Teacher**	**System**	
	Request to make attendance	Display form	
	Select(class, section)	Display attendance page	
	Mark attendance (studentid)	Successfully mark attendance	
	Save attendance	Successfully saved	
Exceptions:	Database is not responding Teacher is not registered in the system. System is not responding.		

2.7.4 Internal Message

In this use case, Teacher will be able to chat with users.

Table 2.7.4 Internal Message use case description

Use Case ID:	Uc4		
Use Case Name:	Internal Message		
Created By:	Muhammad Yasir	**Last Updated By:**	10/11/2022
Date Created:	12/11/2021	**Last Revision Date:**	10/11/2022
Actors:	Teacher		
Description:	Teacher is able to communication with parent ,student and admin		
Trigger:	chat button		
Preconditions:	Teacher must be login to the system. .		
Post conditions:	Teacher is able to communication with parent activity successfully		
Normal Flow:	**Teacher**	**System**	
	1) Click on chat button	2) Display all users	
	3) Click on one users	4) Show chat box	
	5) Write message and send	6) Successfully sent message	
Exceptions:	Database is not responding Teacher is not registered in the system. System is not responding.		

2.7.5 View Timetable

In this use case, Teacher will be able to view timetable.

Table 2.7.5 Teacher view timetable use case description

Use Case ID:	Uc5		
Use Case Name:	View timetable		
Created By:	Muhammad yasir	**Last Updated By:**	07-04-2022
Date Created:	07-04-2022	**Last Revision Date:**	07-04-2022
Actors:	Teacher		
Description:	Teacher can view timetable		
Trigger:	Timetable Button		
Preconditions:	Teacher must be Login into the system		
Post conditions:	Teacher can view timetable.		
Normal Flow:	**Teacher**	**System**	
	Teacher can view timetable	View timetable Successfully	
Exceptions:	Database is not responding Teacher is not registered in the system. System is not responding.		

2.7.6 Generate Notification

In this use case, Teacher will be able to generate notification into the system.

Table 2.7.6 Teacher generate notification use case description

Use Case ID:	Uc6		
Use Case Name:	Generate Notification		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Techer		
Description:	Techer notify all the parent about meeting details.		
Trigger:	Generate Notification Button		
Preconditions:	Techer must login into system.		
Post conditions:	Techer notify the parents about meeting details.		
Normal Flow:	**Techer**	**System**	
	Request to generate notification	Display all classes	
	Select one class	Show notification page	
	Enter Notification details(TitleName, description, Date)	Successfully generated notification	
Exceptions:	Database is not responding Techer is not registered in the system. System is not responding.		

2.7.7 View Notification

In this use case, Teacher will be able to view notification.

Table 2.7.7 Teacher view notification use case description

Use Case ID:	Uc6		
Use Case Name:	View Notification		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Techer		
Description:	Techer view all the notification about meeting details.		
Trigger:	View Notification Button		
Preconditions:	Techer must login into system.		
Post conditions:	Techer view notification successfully.		
Normal Flow:	**Techer**	**System**	
	Request to view notification	Display all notification	
Exceptions:	Database is not responding Techer is not registered in the system. System is not responding.		

2.8. Teacher System sequence diagram (SSD)

Teacher System sequence diagram (SSD) is a sequence diagram that shows, for a particular scenario of a use case, the events that external.

2.8.1. Login

This is system sequence diagram which illustrates the flow of Teacher login to system and communication between Teacher and system with abstract level details. Teacher send request by clicking on button and system interact with database and respond according to request and data provided where necessary

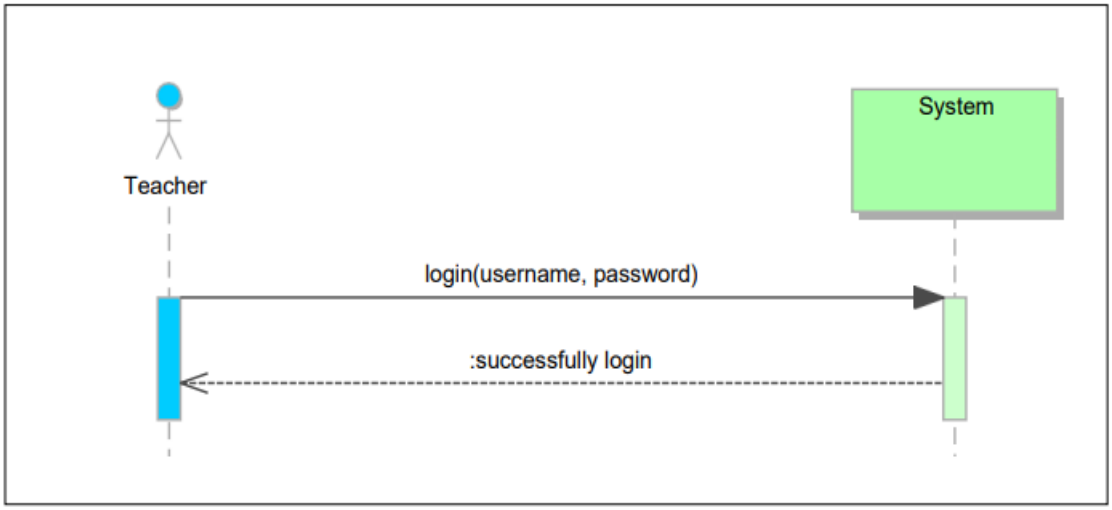


Figure 2.8.1 Teacher login

2.8.2. Generate Result Card

This is system sequence diagram which illustrates the flow of Teacher upload result card of student's and communication between Teacher and system with abstract level details. Teacher send request by clicking on button and system interact with database and respond according to request and data provided where necessary.

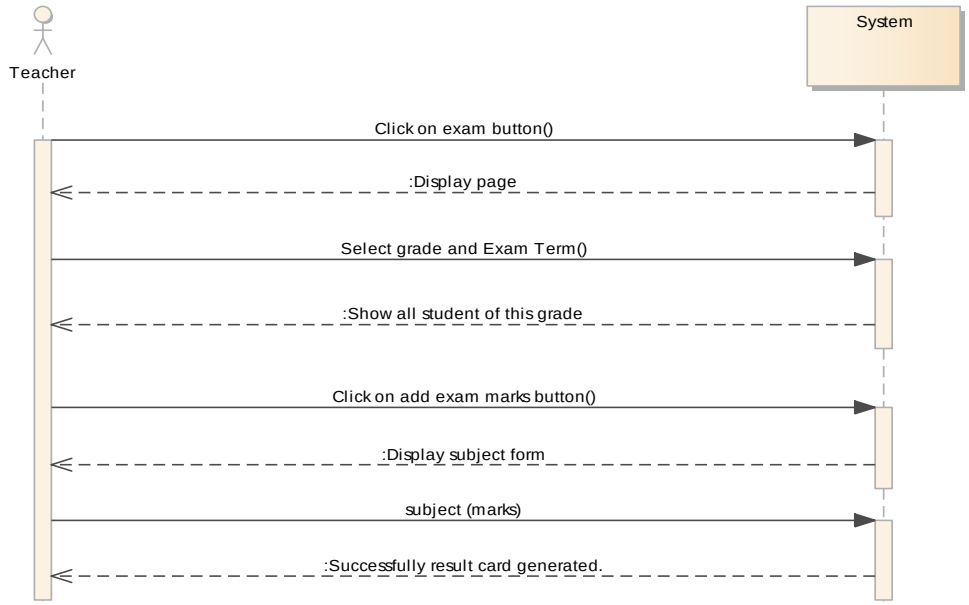


Figure 2.8.2 Teacher generate result card

2.8.3. Mark Attendance

This is system sequence diagram which illustrates the flow of Teacher mark attendance and communication between Teacher and system with abstract level details. Teacher send request by clicking on button and system interact with database and respond according to request and data provided where necessary

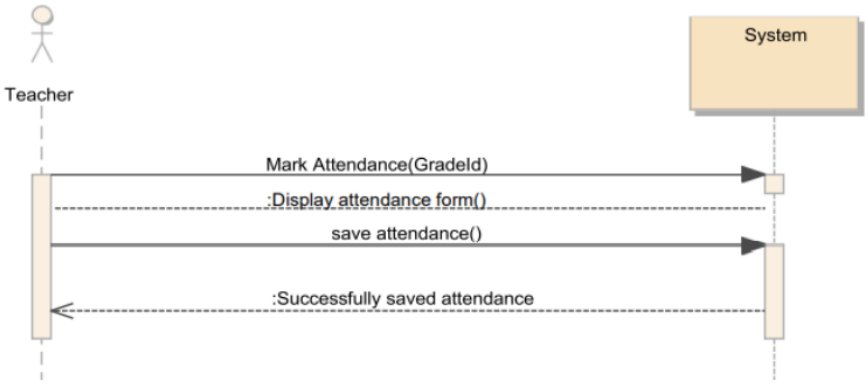


Figure 2.8.3 Teacher mark attendance

2.8.4. Internal Messge

This is system sequence diagram which illustrates the flow of Teacher internal message with users and communication between Teacher and system with abstract level details. Teacher send request by clicking on button and system interact with database and respond according to request and data provided where necessary

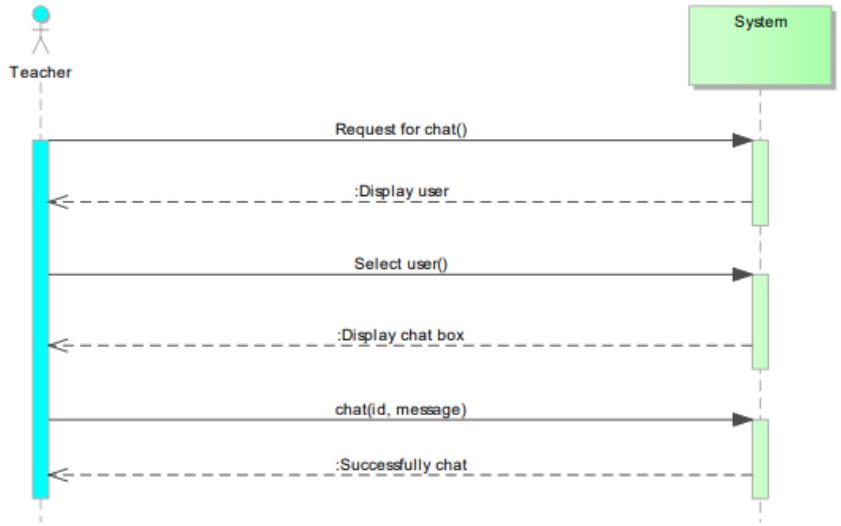


Figure 2.8.4 Teacher chat inbox

2.8.5. Generate Notification

This is system sequence diagram which illustrates the flow of Teacher Generate notification and communication between Teacher and system with abstract level details. Teacher send request by clicking on button and system interact with database and respond according to request and data provided where necessary.

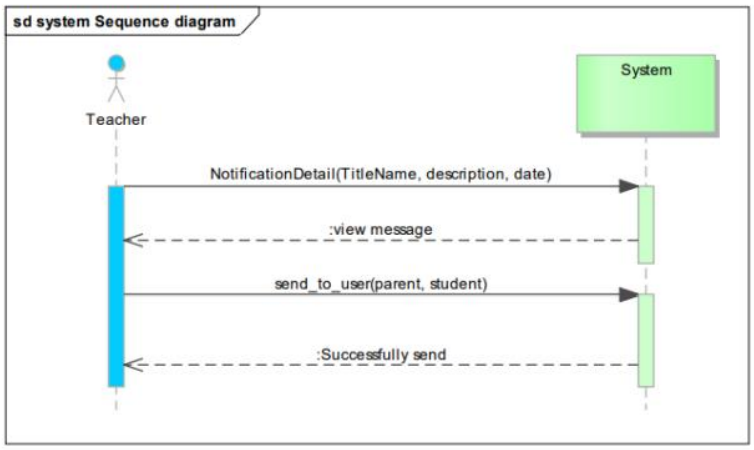


Figure 2.8.5 Teacher generate notification

2.8.6. View Notification

This is the sequence of interaction between the view notification process and Actor(Teacher) it shows how actor interact with

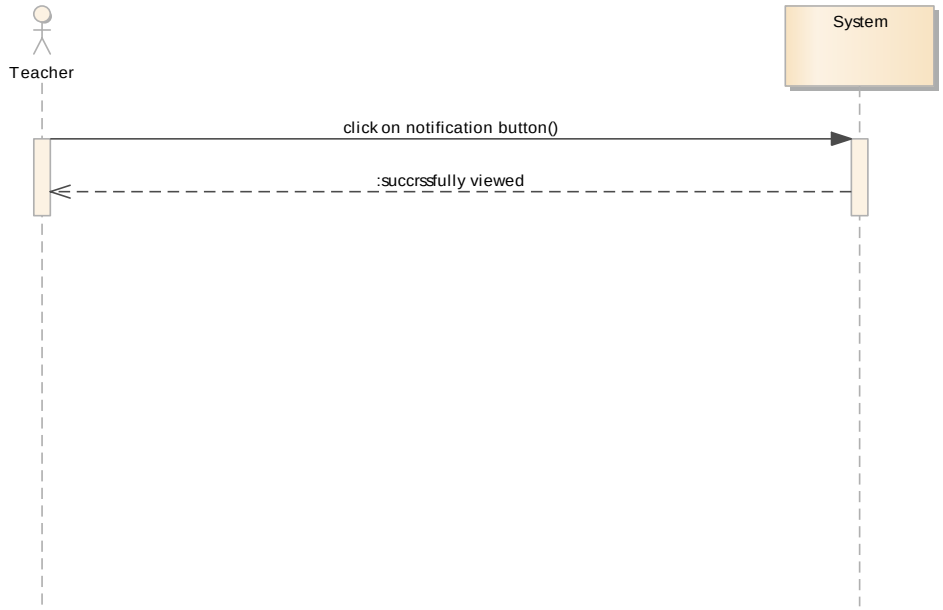


Figure 2.8.6 Teacher view notification

2.8.7. View timetable

This is the sequence of interaction between the view timetable process and Actor(Teacher) it shows how actor interact with

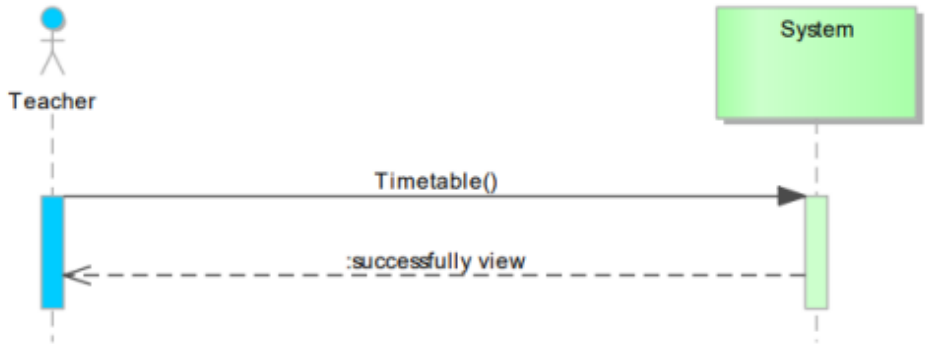


Figure 2.8.7 Teacher view timetable

2.9. Parent Use Case Model

This is our Parent Use Case developed on functional requirements. It displays how theParent interacts with the system.

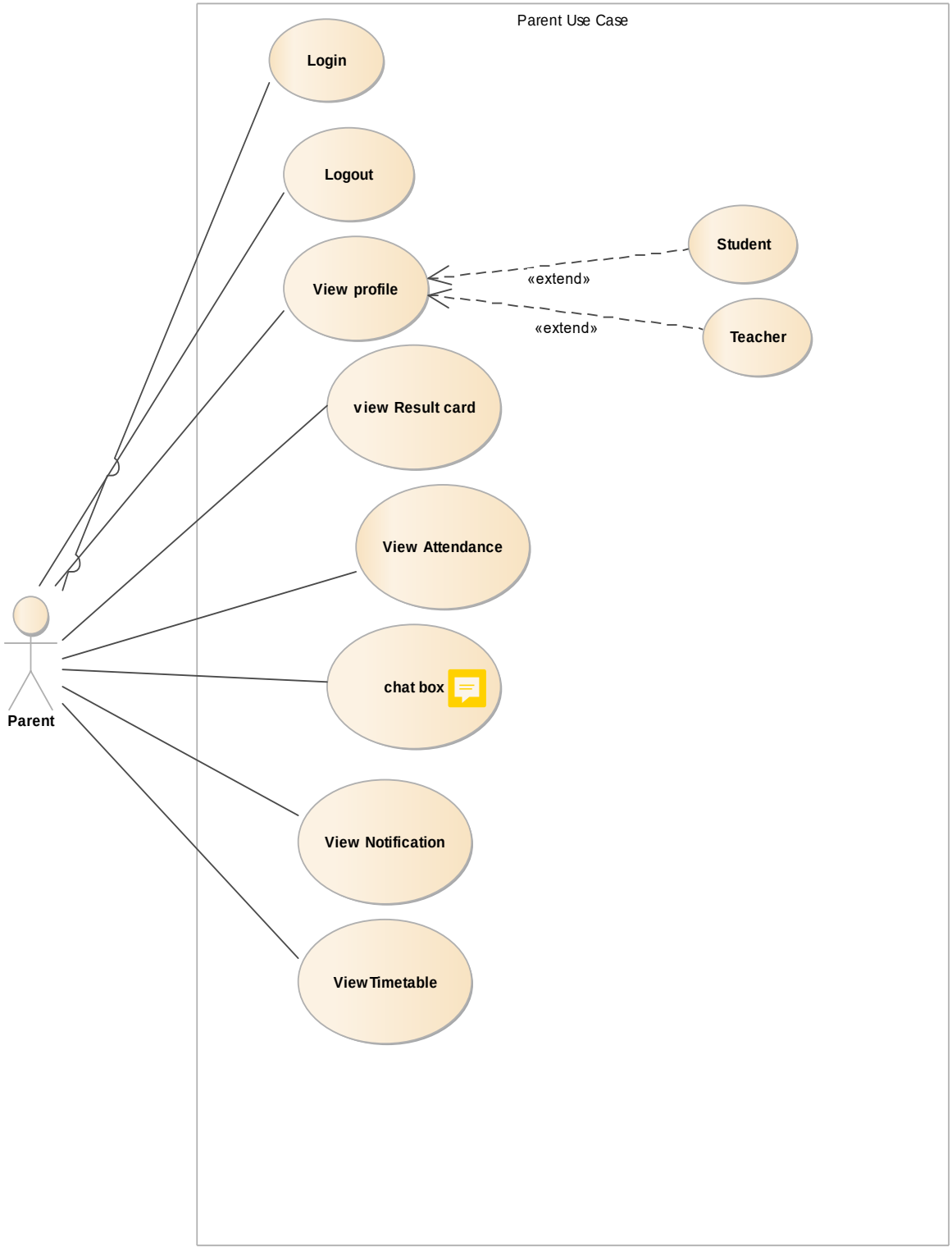


Figure 2.9 Use case parent

2.10. Parent use case description:

2.10.1. Parent Login

Parent Login use case contains the functionality of Parent sign in to the system. Parentwill provide the correct username and password for successful logging in to the system. If the username is not correct then the login into the system will not be performed.

Table 2.10.1 Parent login use case description

Use Case ID:	Uc1		
Use Case Name:	Login		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Student		
Description:	Student can login to the system by providing username, password activities.		
Trigger:	Login button		
Preconditions:	Student must be register to system.		
Post conditions:	Student successfully login to the system.		
Normal Flow:	Student	System	
	Request for Login	Display Login Page	
	Login (Username, Password)	Login Successful	
Exceptions:	Database is not responding If Student is not registered in the system then the system is not responding.		

2.10.2. View Timetable

In this use case Parent will be able to view timetable of child

Table 2.10.2 Parent view timetable use case description

Use Case ID:	Uc2		
Use Case Name:	Timetable view		
Created By:	Muhammad yasir	**Last Updated By:**	12/11/2022
Date Created:	12/11/2022	**Last Revision Date:**	12/11/2022
Actors:	Parent		
Description:	Parent can view timetable of child		
Trigger:	Timetable button		
Preconditions:	Parent must be login into the system		
Post conditions:	Parent can view timetable of child activity successfully		
Normal Flow:	**Parent**	**System**	
	1) Click on timetable button	2) Display timetable page	
Exceptions:	Database is not responding Parent is not registered in the system. System is not responding.		

2.10.3. View Notification

In this use case Parent will be able to view important notice, event or any update

Table 2.10.3 Parent view notification use case description

Use Case ID:	Uc3		
Use Case Name:	View Notification		
Created By:	Muhammad yasir	**Last Updated By:**	12/11/2022
Date Created:	12/11/2022	**Last Revision Date:**	12/11/2022
Actors:	Parent		
Description:	Parent can view important notice, event or any update		
Trigger:	Notification button		
Preconditions:	Parent must be login into the system		
Post conditions:	Parent can view notification activity successfully		
Normal Flow:	**Parent**	**System**	
	1) Click on notification button	2) Display all notification	
Exceptions:	Database is not responding Parent is not registered in the system. System is not responding.		

2.10.4. View Result Card

In this use case, Parent will be able to view result card of student.

Table 2.10.4 Parent view result card use case description

Use Case ID:	Uc4		
Use Case Name:	Result card view		
Created By:	Muhammad yasir	**Last Updated By:**	12/12/2022
Date Created:	12/12/2022	**Last Revision Date:**	12/12/2022
Actors:	Parent		
Description:	Parent can view result card of child		
Trigger:	Result card button		
Preconditions:	Parent must be login into the system		
Post conditions:	Parent can view result card of child activity successfully		
Normal Flow:	**Parent**	**System**	
	1) Click on Exam button	2) Display page	
	3) Select (year, examName)	4) Successfully viewed Result card	
Exceptions:	Database is not responding Parent is not registered in the system. System is not responding.		

2.10.5. View Profile

In this use case, Parent will be able to view profile of student.

Table 2.10.5 Parent view profile use case description

Use Case ID:	Uc5		
Use Case Name:	Result card view		
Created By:	Muhammad yasir	**Last Updated By:**	12/12/2022
Date Created:	12/12/2022	**Last Revision Date:**	12/12/2022
Actors:	Parent		
Description:	Parent can view profile of teacher, student		
Trigger:	Result card button		
Preconditions:	Parent must be login into the system		
Post conditions:	Parent can view profile of teacher or student successfully		
Normal Flow:	**Parent**	**System**	
	1) Click on profile button	2) Successfully profile viewed	
Exceptions:	Database is not responding Parent is not registered in the system. System is not responding.		

2.10.6. Internal Message

In this use case, Parent will be able to chat with Teacher & Admin.

Table 2.10.6 Parent internal message use case description

Use Case ID:	Uc6		
Use Case Name:	Internal Message		
Created By:	Muhammad yasir	**Last Updated By:**	12/12/2022
Date Created:	12/12/2022	**Last Revision Date:**	12/12/2022
Actors:	Parent		
Description:	Parent is able to communication with teacher		
Trigger:	chat button		
Preconditions:	Parent must be login to the system.		
Post conditions:	Parent is able to communicate with parent activity successfully		
Normal Flow:	**Parent**	**System**	
	1) Click on chat button	2) Display all teacher	
	3) Click on one teacher	4) Show chat box	
	5) Write and send message	6) Successfully sent message	
Exceptions:	Database is not responding Parent is not registered in the system. System is not responding.		

2.10.7. View Attendance

In this use case, Parent will be able to view attendance of student.

Table 2.10.7 Parent view attendance use case description

Use Case ID:	Uc7		
Use Case Name:	View Attendance		
Created By:	Muhammad yasir	**Last Updated By:**	12/12/2022
Date Created:	12/12/2022	**Last Revision Date:**	12/12/2022
Actors:	Parent		
Description:	Parent can view attendance report of child		
Trigger:	Attendance report button		
Preconditions:	Parent must be login into the system		
Post conditions:	Parent can view attendance report activity successfully.		
Normal Flow:	**Parent**	**System**	
	1) Click on attendance button	2) Display page select option	
	3) Select (year, month)	4) Successfully display attendance by date	
Exceptions:	Database is not responding Parent is not registered in the system. System is not responding.		

2.11. Parent System sequence diagram (SSD)

System sequence diagram (SSD) is a sequence diagram that shows, for a particular scenario of a use case, the events that external.

2.11.1. Login:

This is the sequence of interaction between the login process and Actor (Parent) it shows how actor interact with

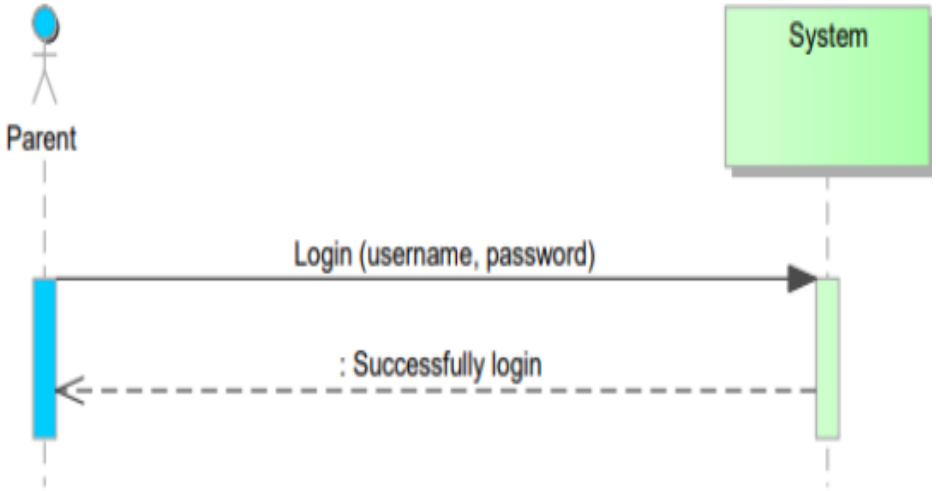


Figure 2.11.1 Parent login

2.11.2. View Result Card

This is the sequence of interaction between the view result card of child process and Actor (Parent) it shows how actor interact with

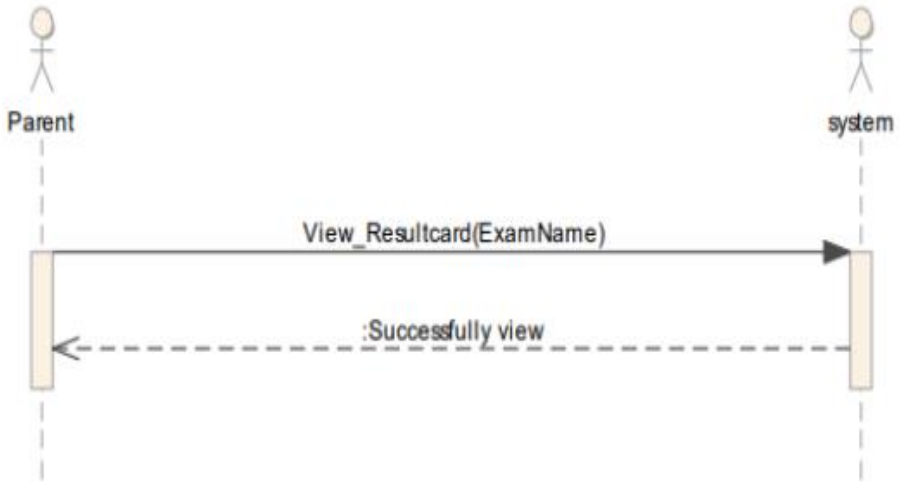


Figure 2.11.2 Parent view result card

2.11.3. View Attendance

This is the sequence of interaction between the view attendance process and Actor(Parent) it shows how actor interact with

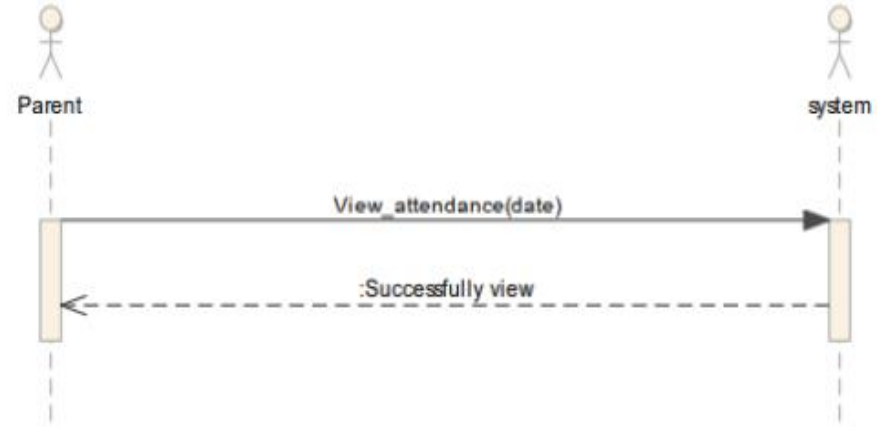


Figure 2.11.3 Parent view attendance

2.11.4. View Timetable

This is the sequence of interaction between the view timetable process and Actor (Parent) it shows how actor interact with

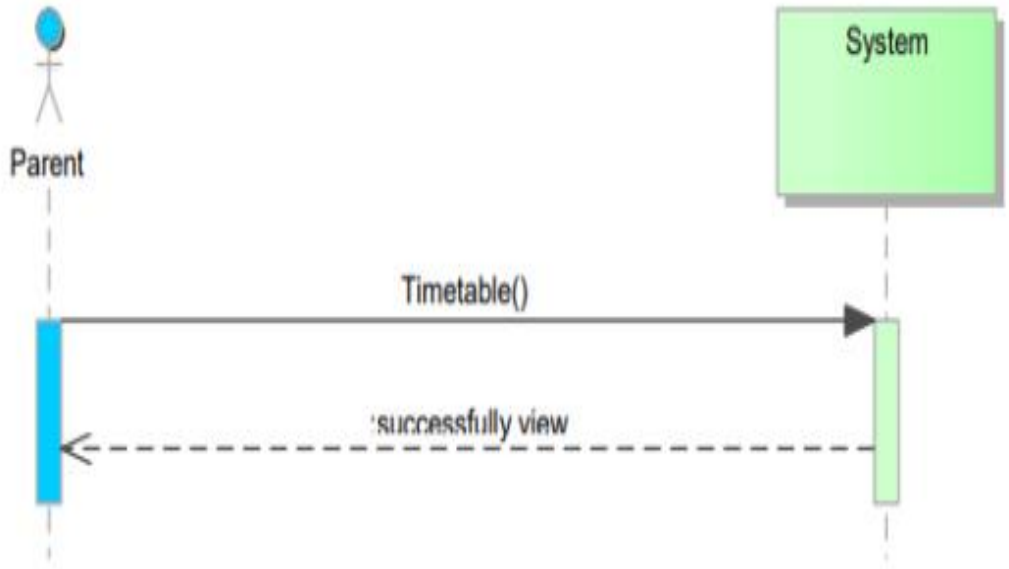


Figure 2.11.4 Parent view timetable

2.11.5. View Notification

This is the sequence of interaction between the view notification process and Actor(Parent) it shows how actor interact with

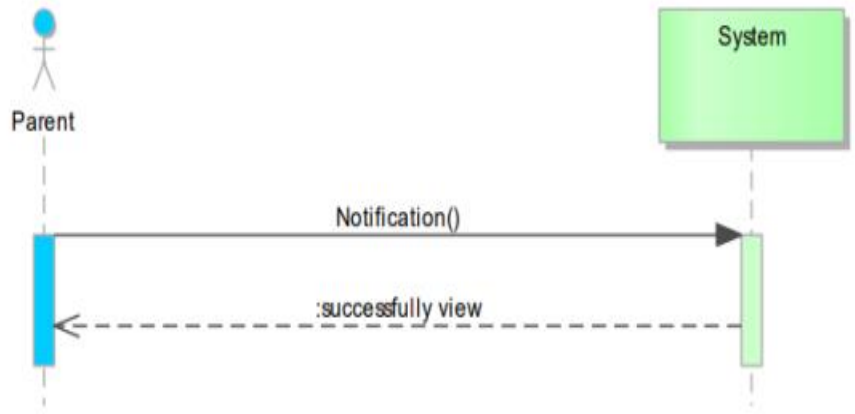


Figure 2.11.5 Parent view notification

2.11.6. Chat inbox

This is the sequence of interaction between the chat box process and Actor (Parent) it shows how actor interact with

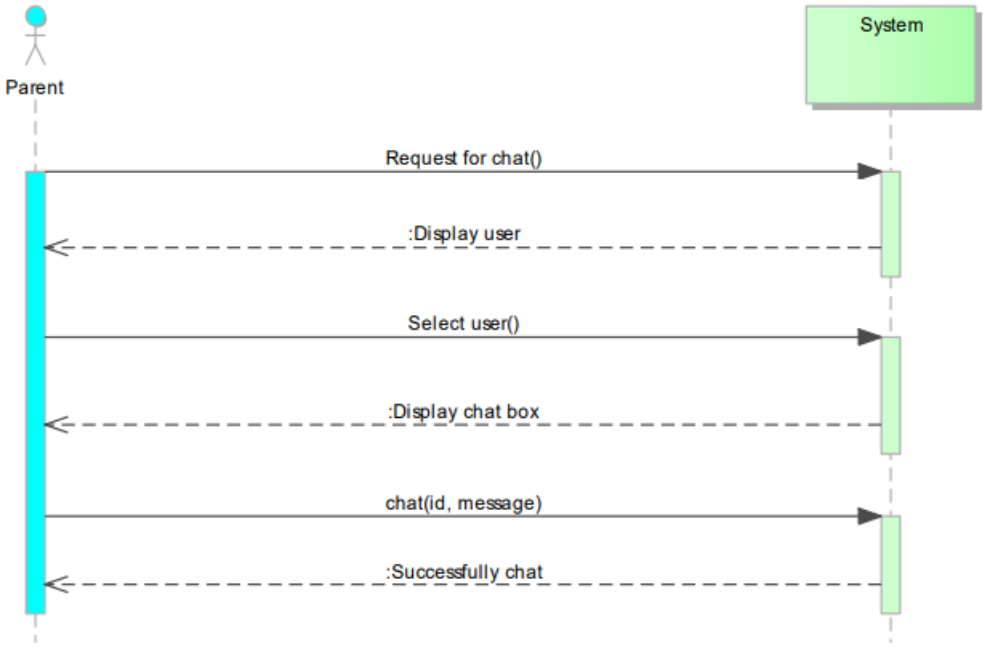


Figure 2.11.6 Parent chat box system sequence diagram

2.12. Student Use Case Model

This is our Student Use Case developed on functional requirements. It displays howthe student interacts with the system.

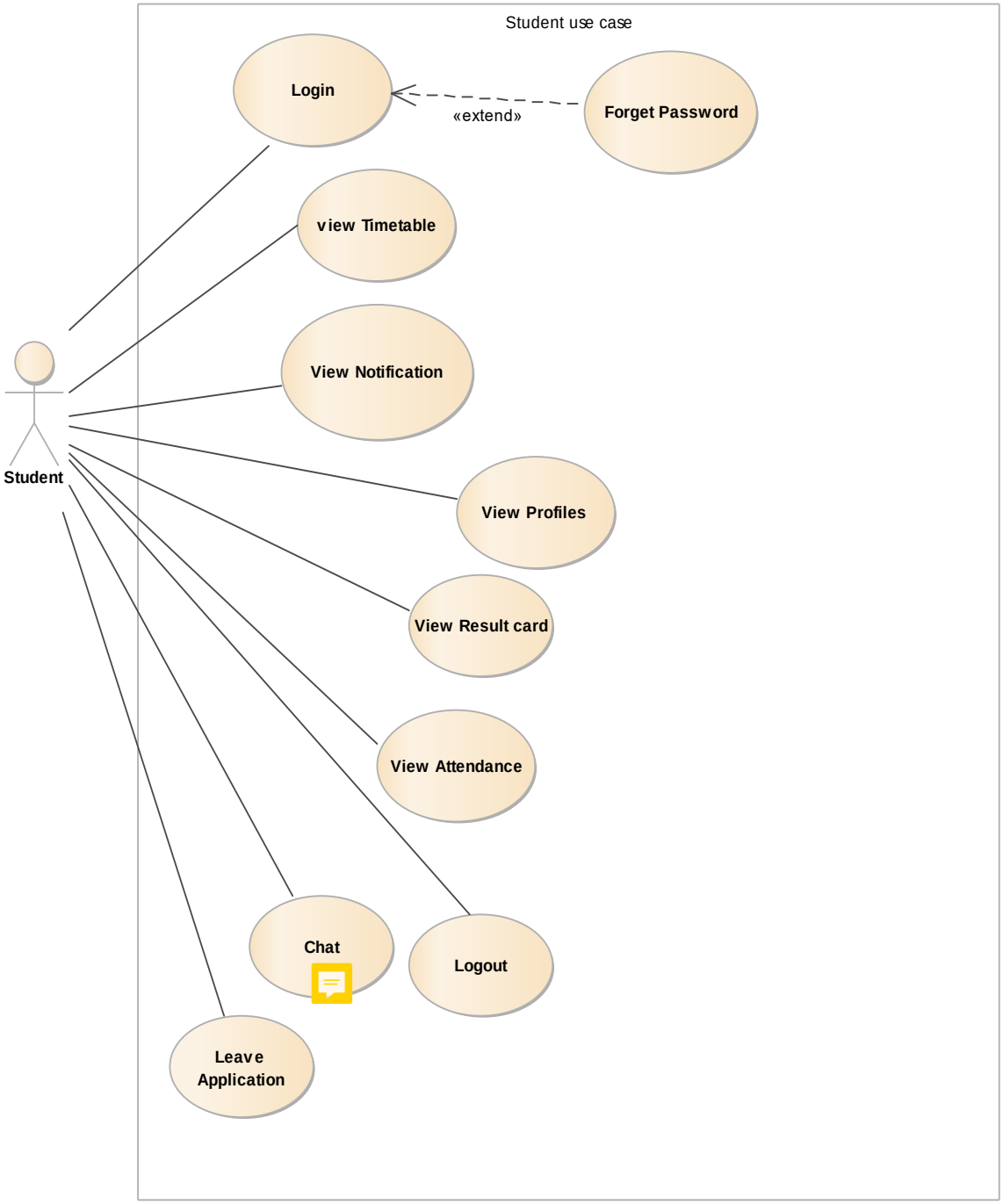


Figure 2.12 Use case student

2.13. Student use case description:

2.13.1. Student Login

Student Login use case contains the functionality of Student sign in to the system. Student will provide the correct username and password for successful logging in to the system. If the username is not correct then the login into the system will not be performed.

Table 2.13.1 Student login use case description

Use Case ID:	Uc1		
Use Case Name:	Login		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Student		
Description:	Student should be login to the system by providing username activities		
Trigger:	Login button		
Preconditions:	Student must be registered into the system		
Post conditions:	Student can login to the system successfully		
Normal Flow:	**Student**	**System**	
	1) Request login	2) Display Login Page	
	3) Login (Username, Password)	4) Login Successful	
Exceptions:	Database is not responding Student is not registered in the system System is not responding.		

2.13.2. View Timetable

In this use case Student will be able to view timetable.

Table 2.13.2 Student view timetable use case description

Use Case ID:	Uc2		
Use Case Name:	Timetable view		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Student		
Description:	Student should be view timetable		
Trigger:	Timetable button		
Preconditions:	Student must be login into the system		
Post conditions:	Student can view timetable activity successfully		
Normal Flow:	**Student**	**System**	
	1) Click on timetable button	2) Display timetable page	
Exceptions:	Database is not responding Student is not registered in the system. System is not responding.		

2.13.3. View Notification

In this use case Student will be able to view important notice, event or any update

Table 2.13.3 Student view notification use case description

Use Case ID:	Uc3		
Use Case Name:	View Notification		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Student		
Description:	Student should be view important notice, event or any update		
Trigger:	Notification button		
Preconditions:	Student must be login into the system		
Post conditions:	Student should be view notification activity successfully		
Normal Flow:	**Student**	**System**	
	1) Click on notification button	2) Display all notification	
Exceptions:	Database is not responding Student is not registered in the system. System is not responding.		

2.13.4. View Result Card

Table 2.13.4 Student view result card use case description

Use Case ID:	Uc4		
Use Case Name:	View Result Card		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Student		
Description:	Student should be view result card		
Trigger:	Result card button		
Preconditions:	Student must be login into the system		
Post conditions:	Student should be view result card activity successfully		
Normal Flow:	**Student**	**System**	
	1) Click on exam button	2) Display page	
	3) Select (year, ExamName)	4) Selected exam Successfully viewed	
Exceptions:	Database is not responding Student is not registered in the system. System is not responding.		

2.13.5. View Profile

Table 2.13.5 Student view profile use case description

Use Case ID:	Uc5		
Use Case Name:	Result card view		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Student		
Description:	Student should be view profile of teacher		
Trigger:	Teacher button		
Preconditions:	Student must be login into the system		
Post conditions:	Student should be view profile of teacher successfully		
Normal Flow:	**Student**	**System**	
	1) Click on profile button	2) Display profile successfully	
Exceptions:	Database is not responding Student is not registered in the system. System is not responding.		

2.13.6. View Attendance

Table 2.13.6 Student view attendance use case description

Use Case ID:	Uc7		
Use Case Name:	View Attendance		
Created By:	Muhammad yasir	**Last Updated By:**	06-04-2022
Date Created:	06-04-2022	**Last Revision Date:**	06-04-2022
Actors:	Student		
Description:	Student should be view attendance report		
Trigger:	Attendance report button		
Preconditions:	Student must be login into the system		
Post conditions:	Student should be view attendance report activity successfully		
Normal Flow:	**Student**	**System**	
	1) Click on attendance button	2) Display attendance page	
	3) Select (year, month)	4) Show attendance by date	
Exceptions:	Database is not responding Student is not registered in the system. System is not responding.		

2.14. Student System Sequence Diagram (SSD)

System sequence diagram (SSD) is a sequence diagram that shows, for a particular scenario of a use case, the events that external.

2.14.1. Login:

This is the sequence of interaction between the login process and Actor (Student) it Shows how actor interact with

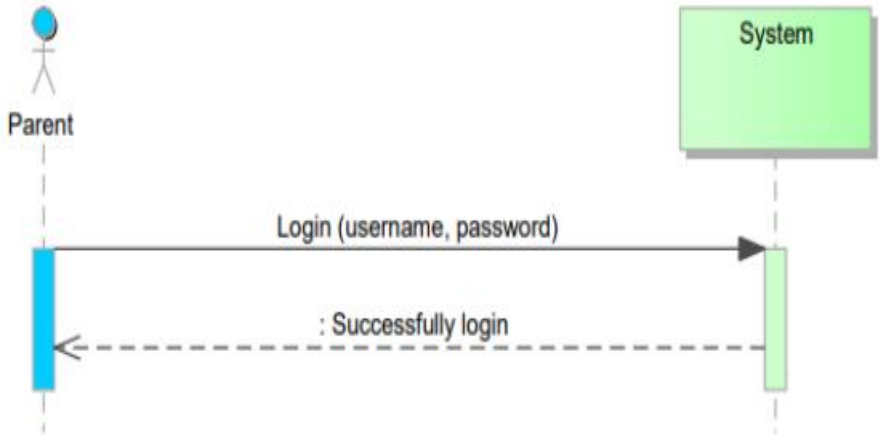


Figure 2.14.1 Student login

2.14.2. View Notification:

This is the sequence of interaction between the view notification process and Actor(Student) it shows how actor interact with

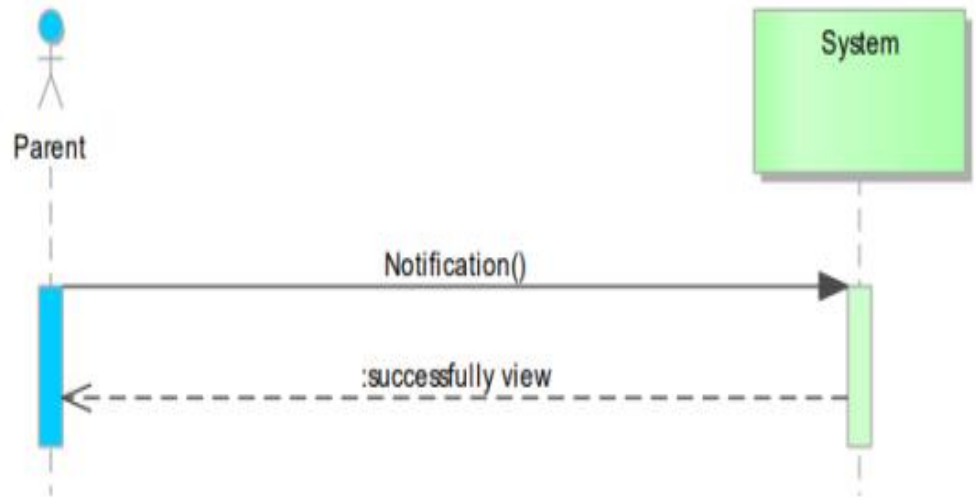


Figure 2.14.2 Student view notification

2.14.3. View Result Card

This is the sequence of interaction between the view result card process and Actor(Student) it shows how actor interact with

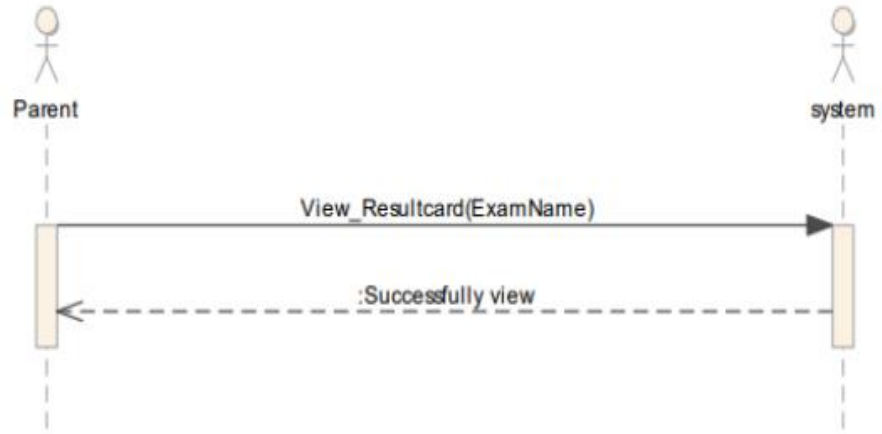


Figure 2.14.3 Student result card view

2.14.4. View Attendance

This is the sequence of interaction between the view attendance process and Actor(student) it shows how actor interact with

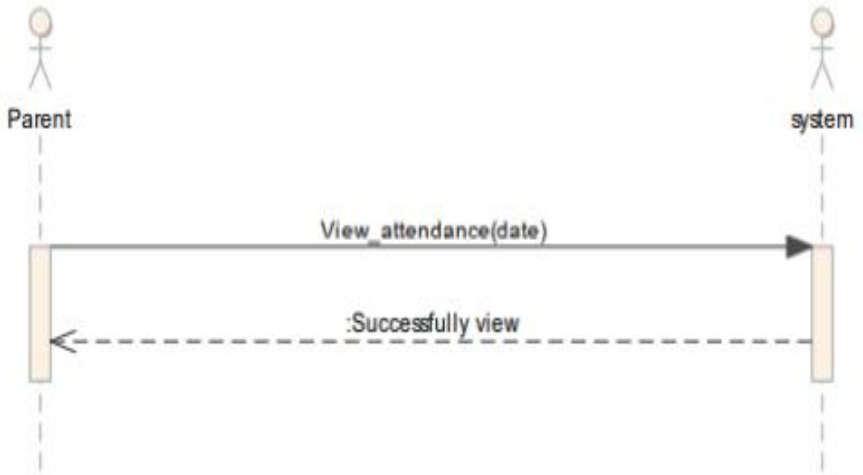


Figure 2.14.4 Student view attendance

2.14.5. View Timetable:

This is the sequence of interaction between the view timetable process and Actor(student) it shows how actor interact with

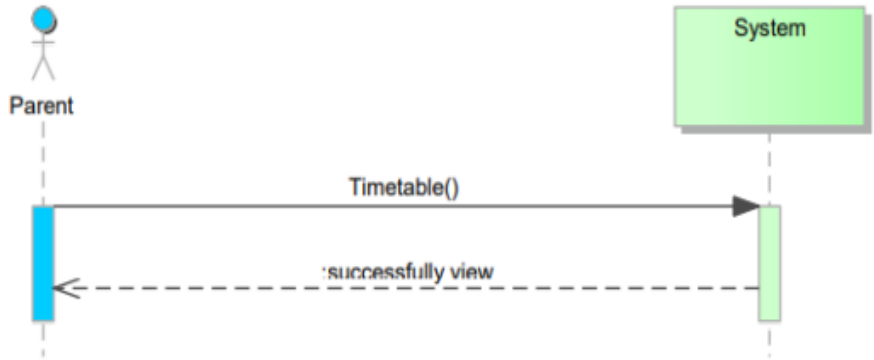


Figure 2.14.5 Student view timetable

2.14.6. Internal Message:

This is the sequence of interaction between the internal message process and Actor(student) it shows how actor interact with

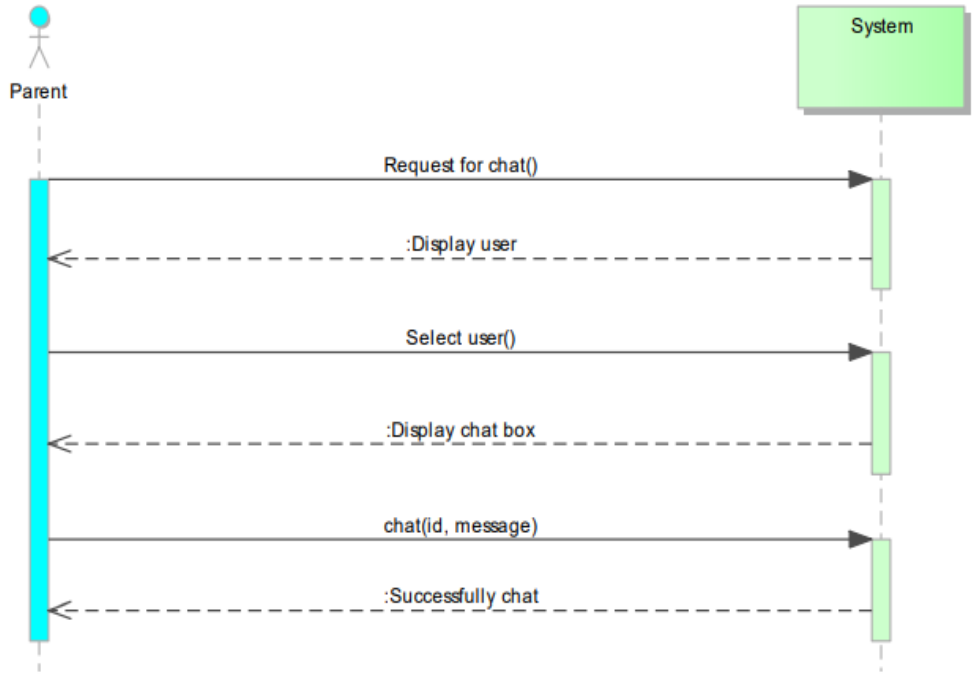


Figure 2.14.6 Student view timetable

2.15. Domain Model

This the domain model of the system application that illustrates about the different classes exist in our system and how they interact with each other. It shows the cardinalitiesand relation between all classes

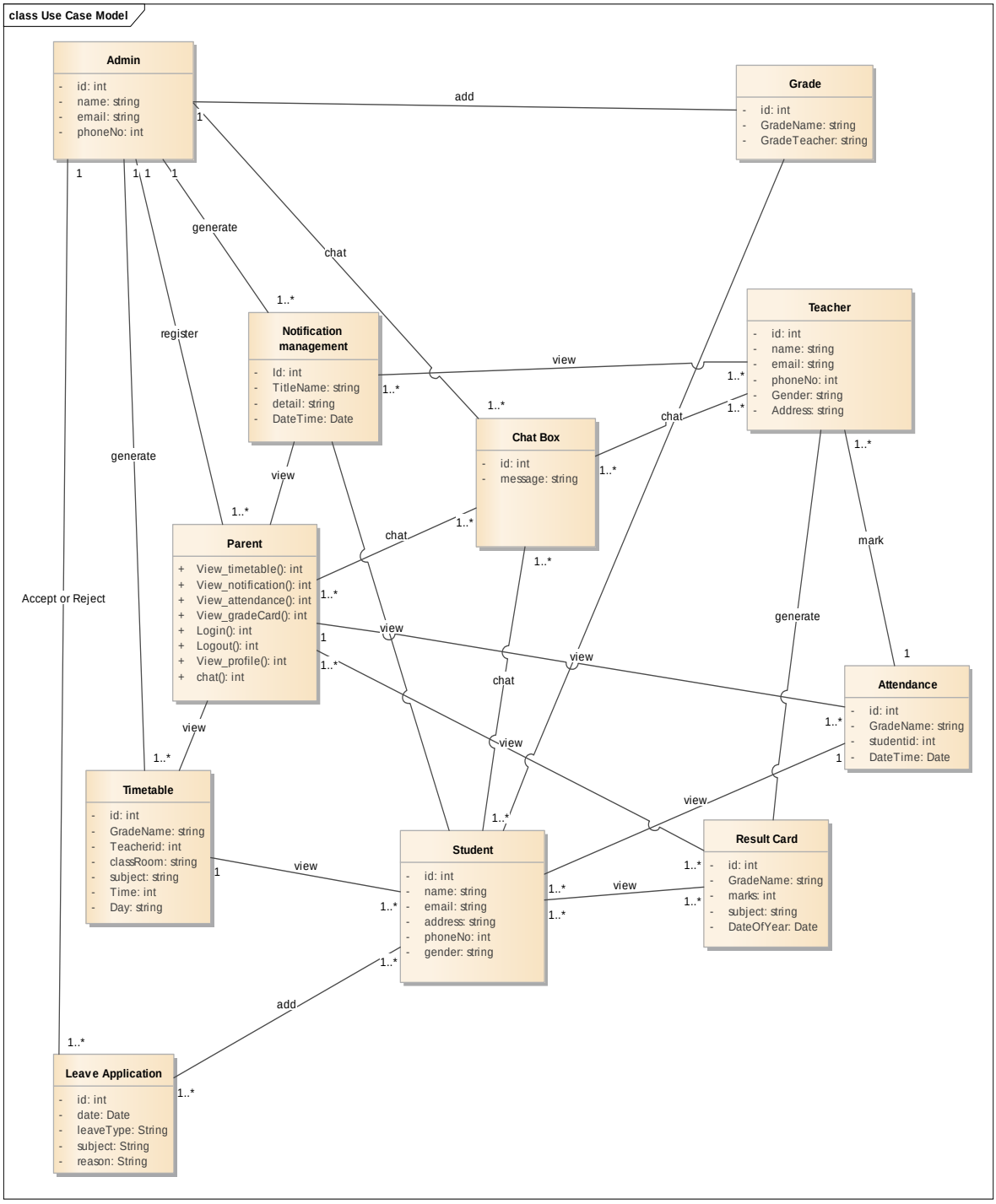


Figure 2.15 Domain Model

Chapter 3

System Design

The purpose of this chapter is to provide information that is complementary to the development phase. Without an adequate design, that delivers required function as well as quality attributes, the project will fail. However, communicating architecture to its stakeholders is as important a job as creating it in the first place.

3.1. Layer Definition:

The table 3.1 enlists the layers of the system.

Table 3.1 layers Definition

Layers	Description
Presentation layer	b This layer will be used for the interaction with the Student, teacher and parent through a graphical portal interface.
Business Logic Layer	All the constraints and majority of the functions reside under this layer.
Database Layer	Database layer contains the database of the application being developed.

3.1.1. Presentation Layer:

Occupies the top level and displays information related to services available on a website. This tier communicates with other tiers by sending results to the browser and other tiers in the network.

3.1.2. Business Logic Layer:

Application Layer also called the middle tier, logic tier, business logic or logic tier, this tier is pulled from the presentation tier. It controls application functionality by performing detailed processing.

3.2. Class Diagram:

This is a class diagram of our app project that illustrates the classes with their attributes, type's methods, encapsulation, cardinalities and relation between all entities. Following is the class diagram of our system.

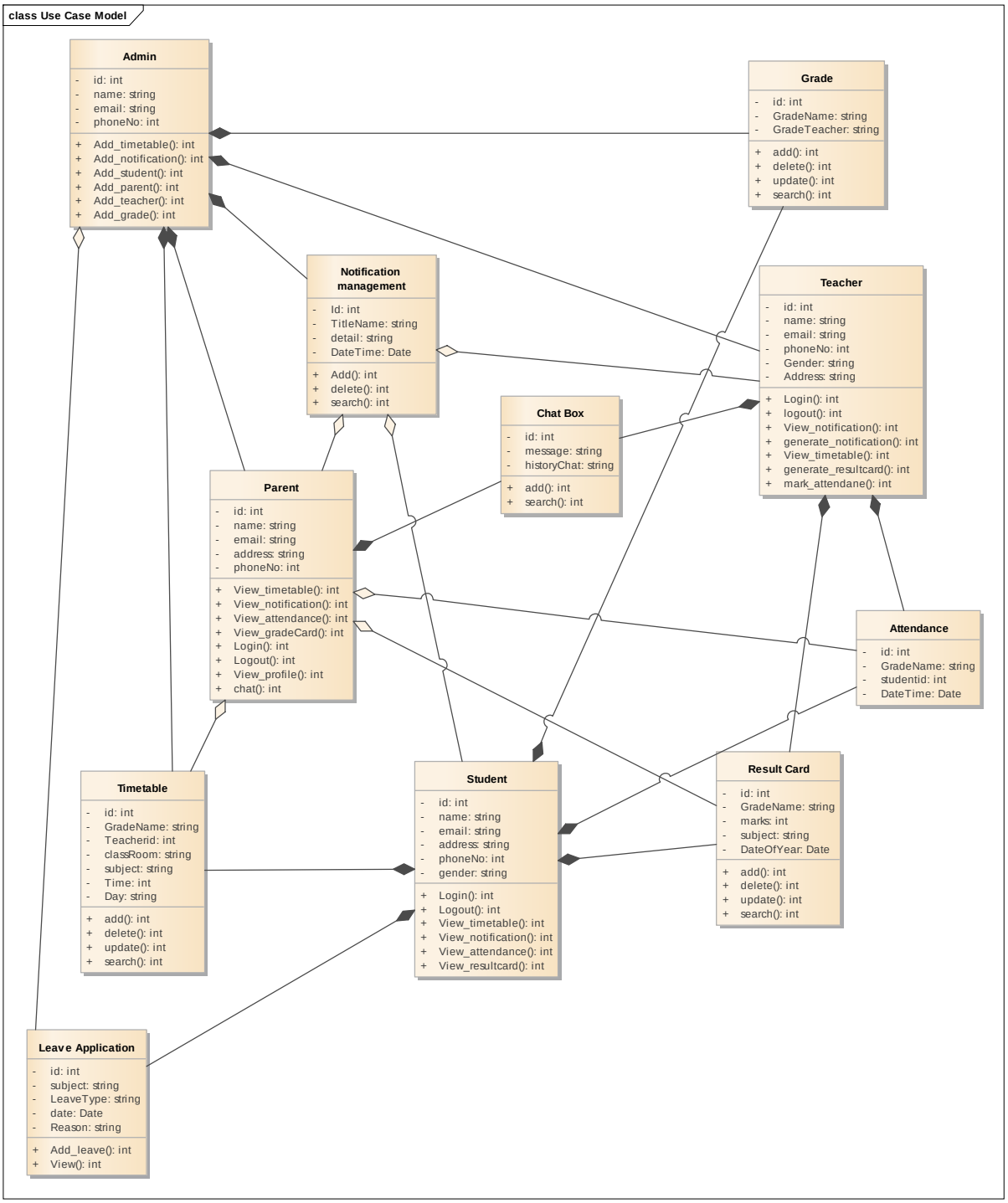


Figure 3.2 Class Diagram

3.3. Entity relationship diagram

An entity relationship diagram (ERD), also known as an entity relationship model, isa graphical representation that depicts relationships among people, objects, places, concepts or events within an information technology (IT) system. Entity relationship diagrams provide a visual starting point for database design that can also be used to help determine information system requirements throughout an organization.

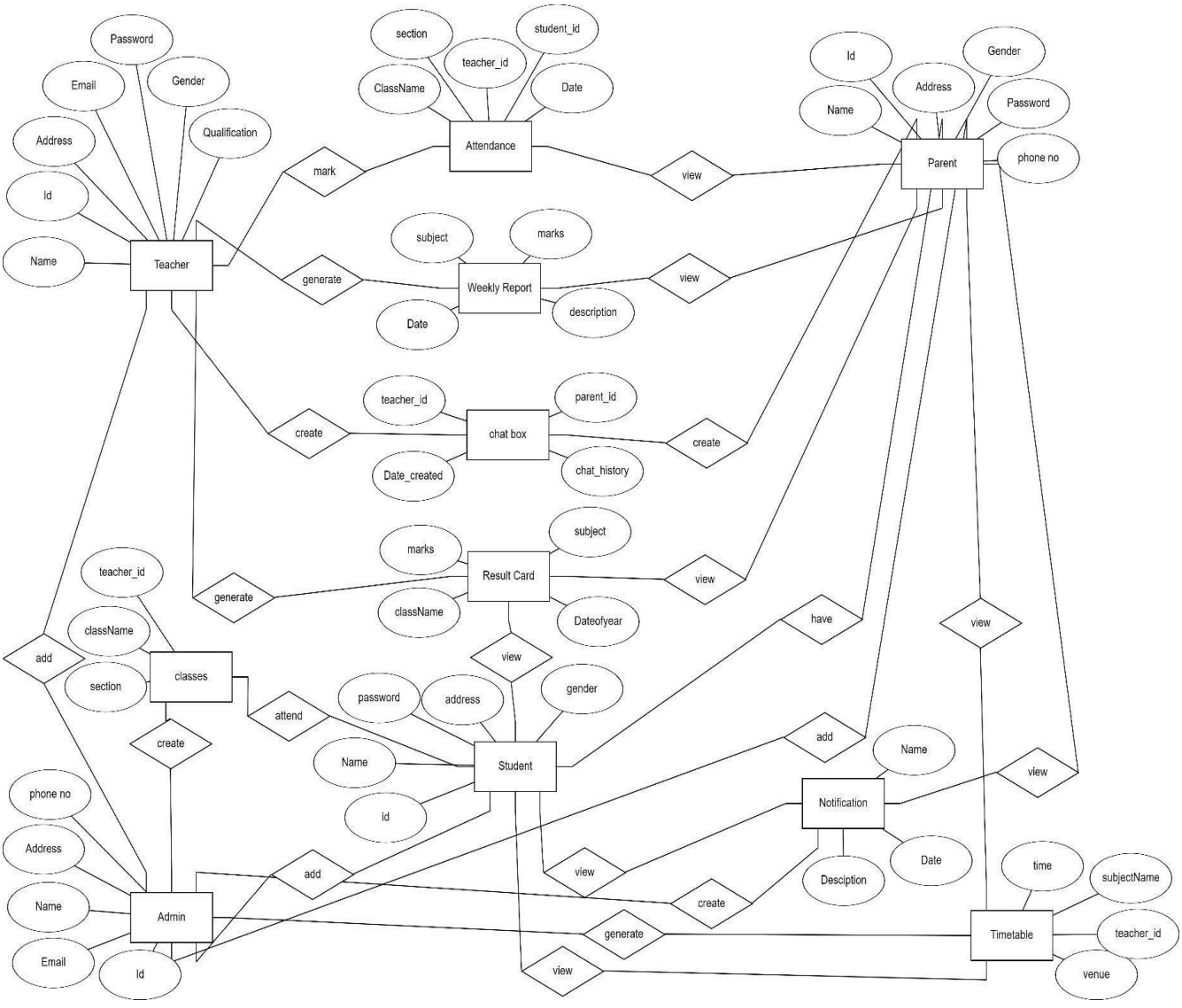


Figure 3.3 Entity relationship diagram

3.4. Sequence Diagram

Sequence diagram is the most common kind of interaction diagram, which focuses on the message interchange between a numbers of lifelines. Sequence diagram describes an interaction by focusing on the sequence of messages that are exchanged, along with their corresponding occurrence specifications on the lifelines. Sequence Diagram is as follows:

3.4.1. Admin Sequence diagram

3.4.1.1. Login

This is the system sequence diagram of the Login use case it shows the whole process how the Admin extract information from UI and input through UI. How theUI extract the data from Database handler. It also display usa sequence of interaction of all the process

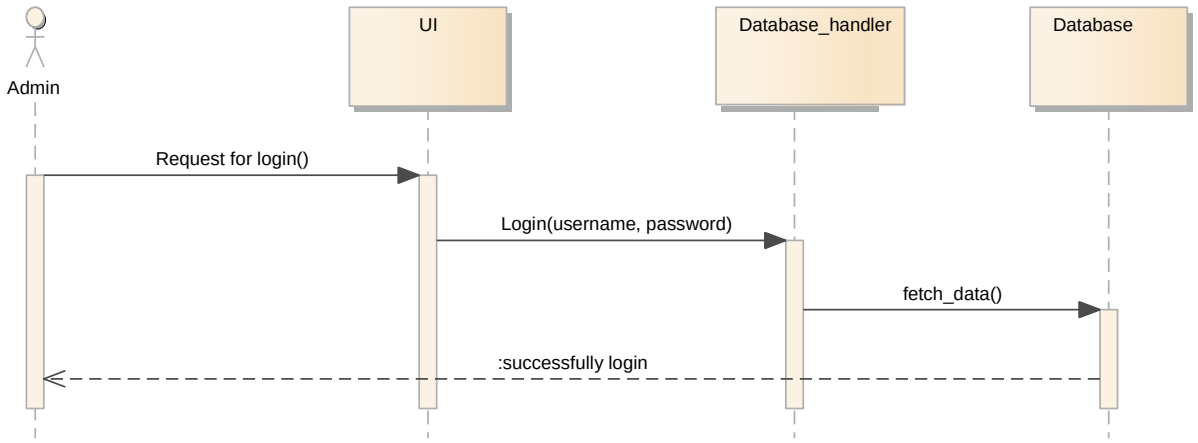


Figure 3.4.1.1 Admin login

3.4.1.2. Generate Notification

This is the system sequence diagram of the generate notification use case it shows thewhole process how the Admin extract information from UI and input through UI. How theUI extract the data from Database handler. It also display us a sequence of interaction of all the process

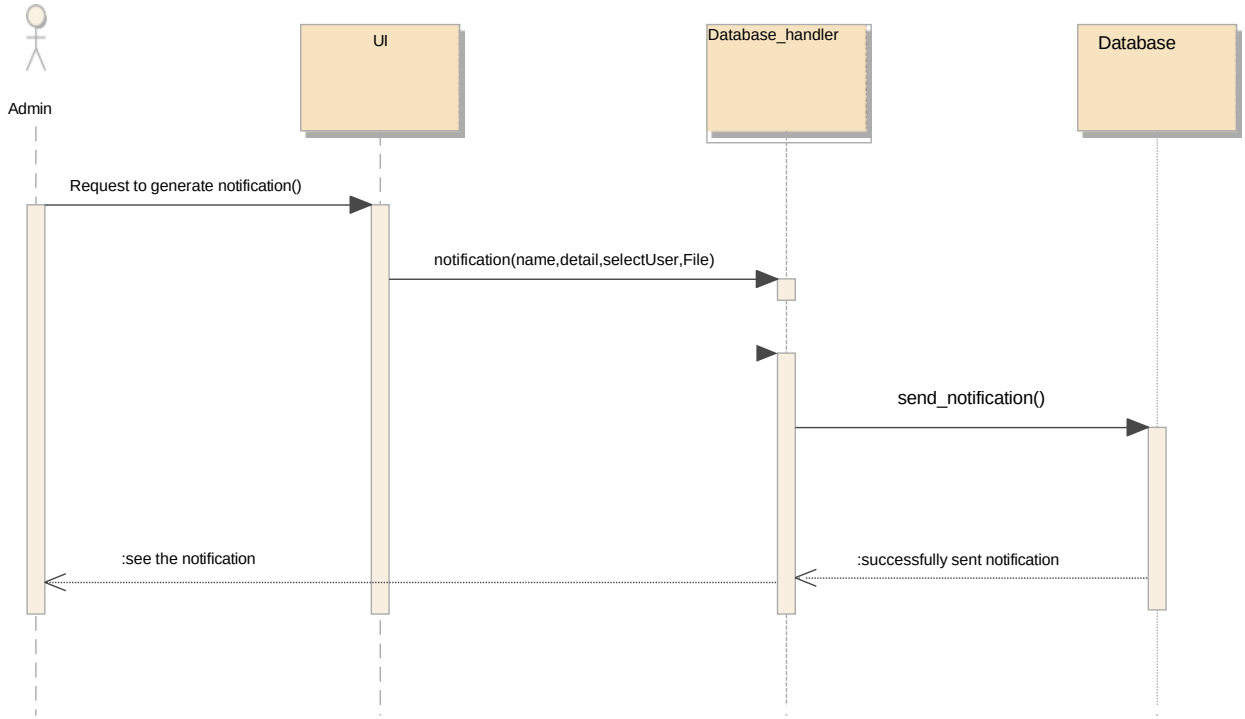


Figure 3.4.1.2 Admin generate notification

3.4.1.3. Generate timetable

This is the system sequence diagram of the generate timetable use case it showsthe whole process how the Admin extract information from UI and input through UI. How the UI extract the data from Database handler. It alsodisplay us a sequence of interaction of all the process

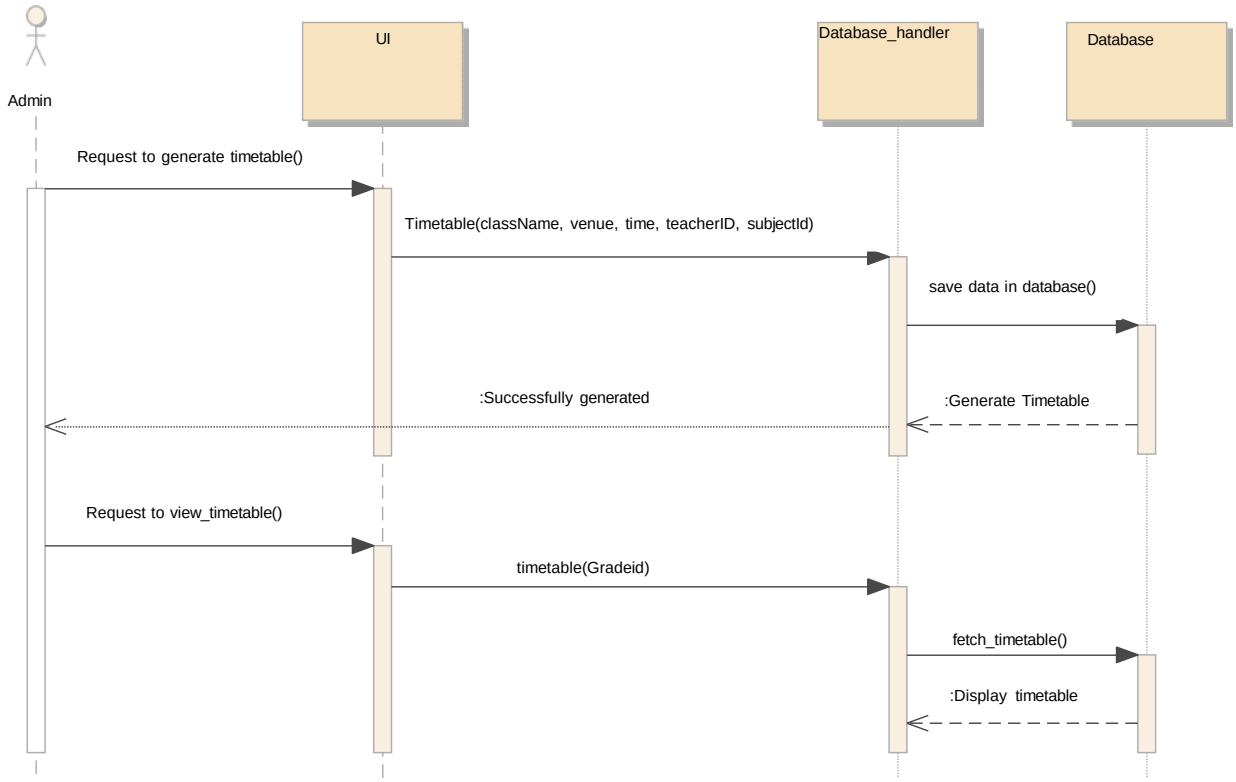


Figure 3.4.1.3 Admin generate timetable

3.4.1.4. Add class

This is the system sequence diagram of the add class use case it shows the wholeprocess how the Admin extract information from UI and input through UI. How the UI extract the data from Database handler. It also display us a sequence of interaction of all the process

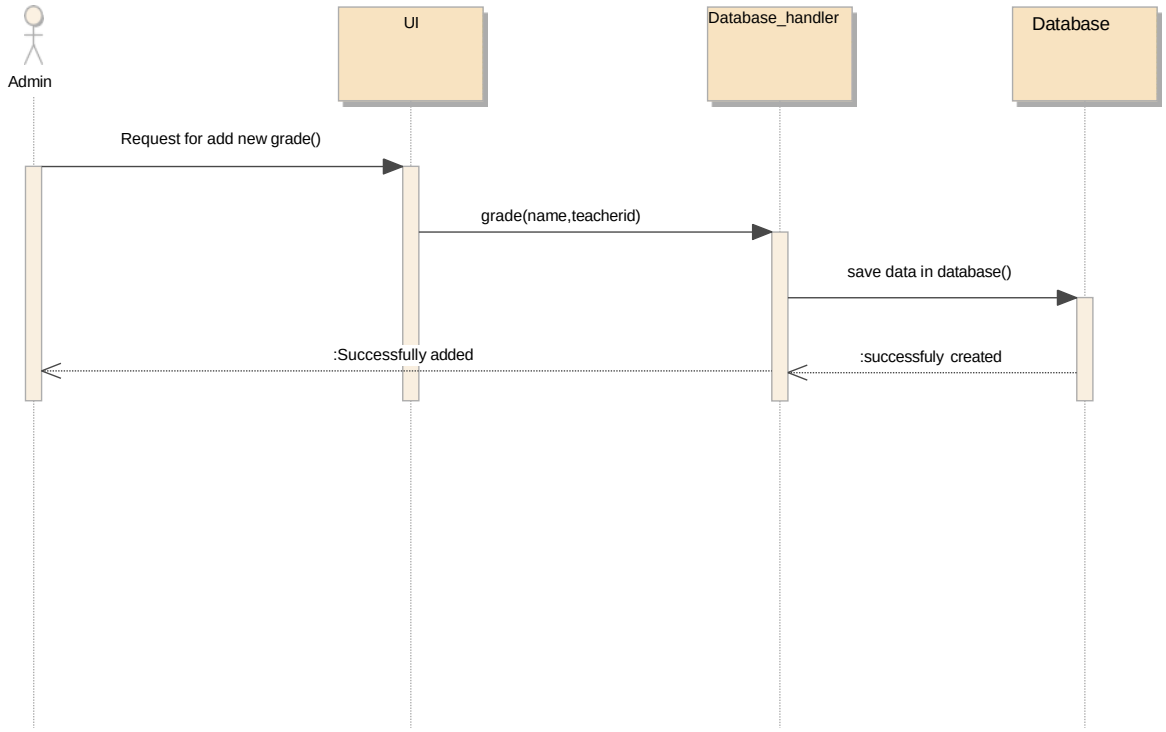


Figure 3.4.1.4 Admin add class

3.4.2. Teacher sequence diagram

3.4.2.1. Generate Notification

This is the system sequence diagram of the generate notification use case it shows thewhole process how the Admin extract information from UI and input through UI. How theUI extract the data from Database handler. It also display us a sequence of interaction of all the process

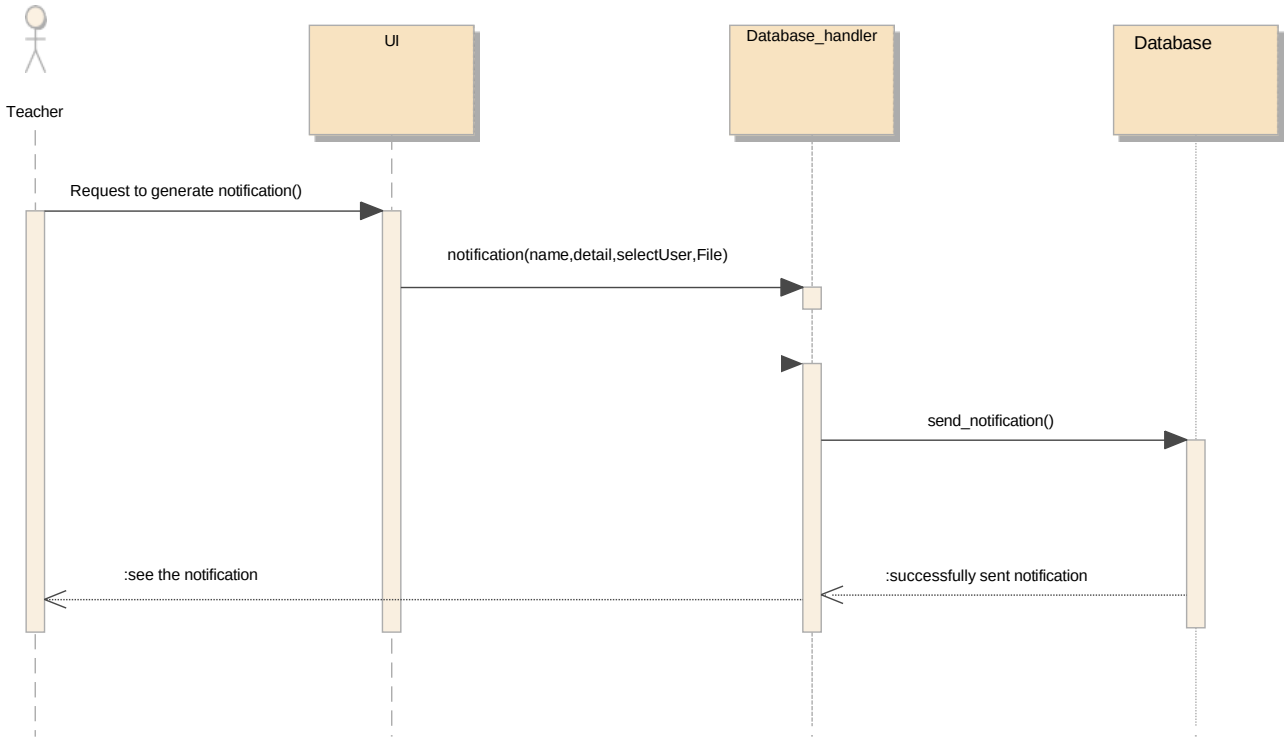


Figure 3.4.2.1 Teacher generate notification

3.4.2.2. View Notification

This is the system sequence diagram of the view notification use case it shows the whole process how the Teacher extract information from UI and input through UI. How the UI extract the data from Database handler. It also displayus a sequence of interaction of all the process

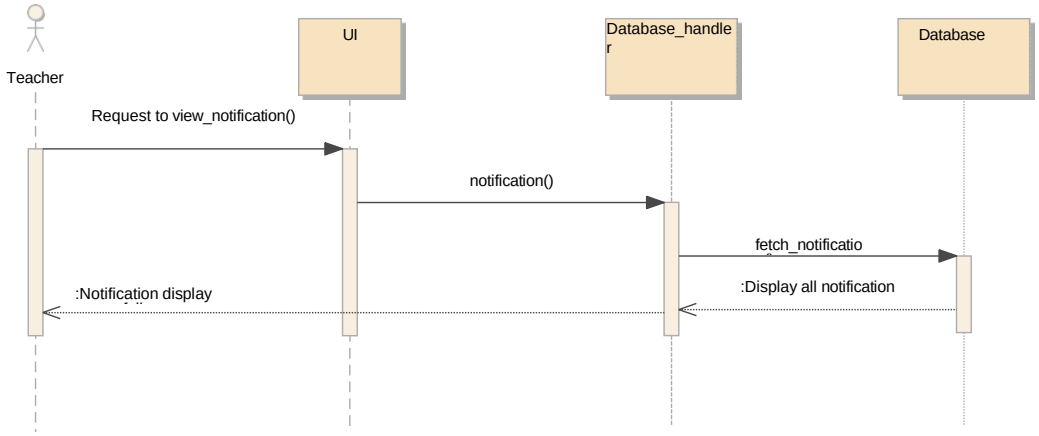


Figure 3.4.2.2 Teacher view notification

3.4.2.3. Mark Attendance

This is the system sequence diagram of the mark attendance use case it shows the whole process how the Teacher extract information from UI and input through UI. How the UI extract the data from Database handler. It also displayus a sequence of interaction of all the process

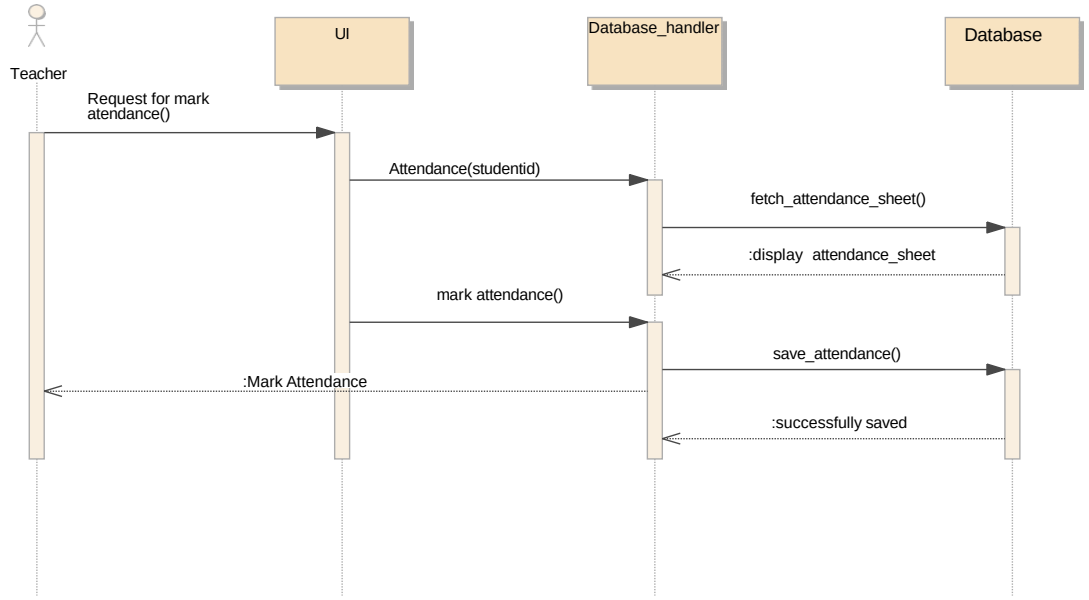


Figure 3.4.2.3 Teacher mark attendance

3.4.2.4. Generate Result card

This is the system sequence diagram of the generate result card use case it shows the whole process how the Teacher extract information from UI and input through UI. How the UI extract the data from Database handler. It also displayus a sequence of interaction of all the process

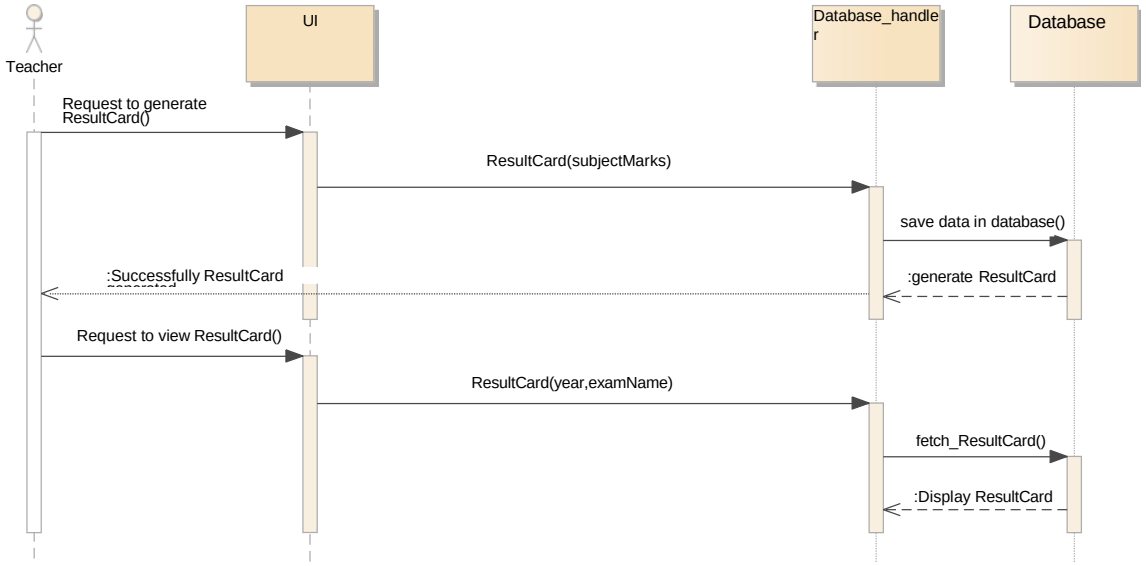


Figure 3.4.2.4 Teacher generate result card

3.4.2.5. Internal Message

This is the system sequence diagram of the internal message use case it shows the whole process how the Teacher extract information from UI and input through UI. How theUI extract the data from Database handler. It also displayus a sequence of interaction of all the process

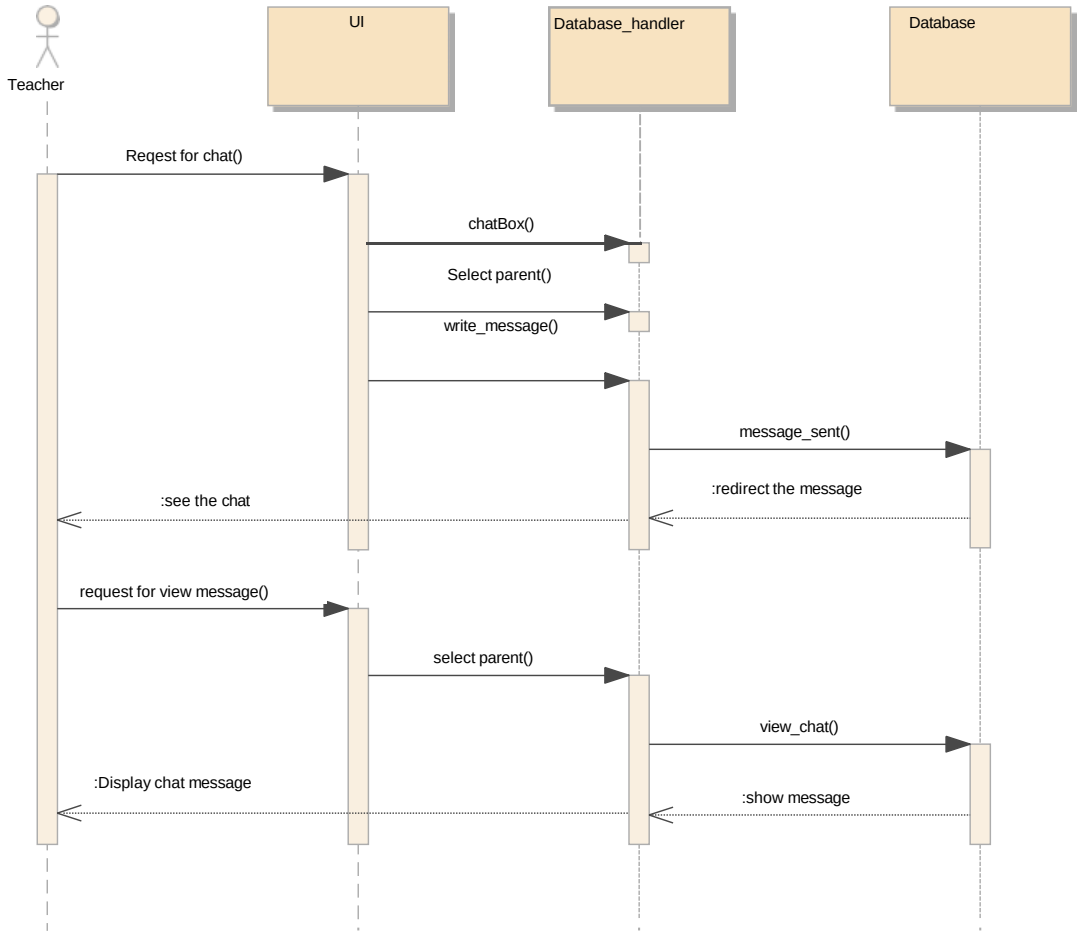


Figure 3.4.2.5 Teacher internal messaging

3.4.3. Parent Sequence Diagram

3.4.3.1. View Notification

This is the system sequence diagram of the view notification use case it shows the whole process how the parent extract information from UI and input through UI. How theUI extract the data from Database handler.it also display us a sequence of interaction of all the process

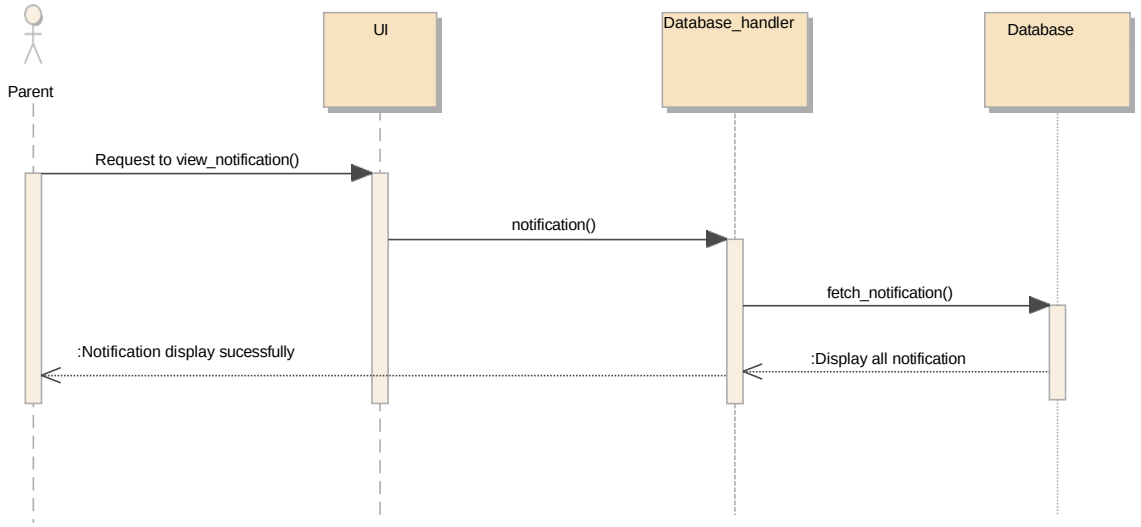


Figure 3.4.3.1 Parent view notification

3.4.3.2. View Attendance

This is the system sequence diagram of the view attendance use case it shows the whole process how the parent extract information from UI and input through UI. How theUI extract the data from Database handler. It also display us a sequence of interaction of all the process

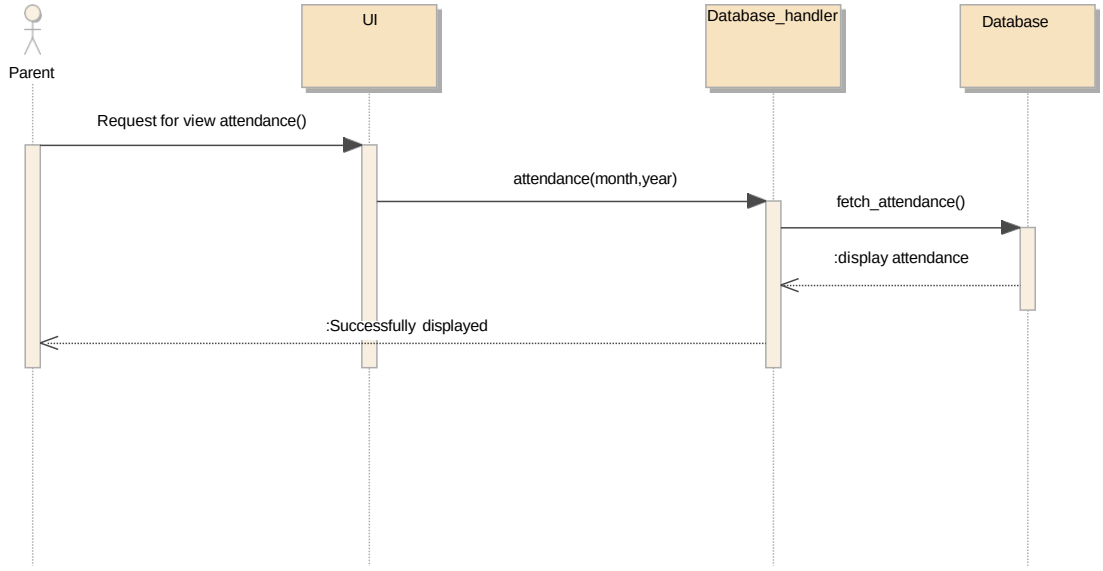


Figure 3.4.3.2 Parent view attendance

3.4.3.3. View Timetable

This is the system sequence diagram of the view timetable use case it shows the whole process how the parent extract information from UI and input through UI. How theUI extract the data from Database handler. It also display us a sequence of interaction of all the process

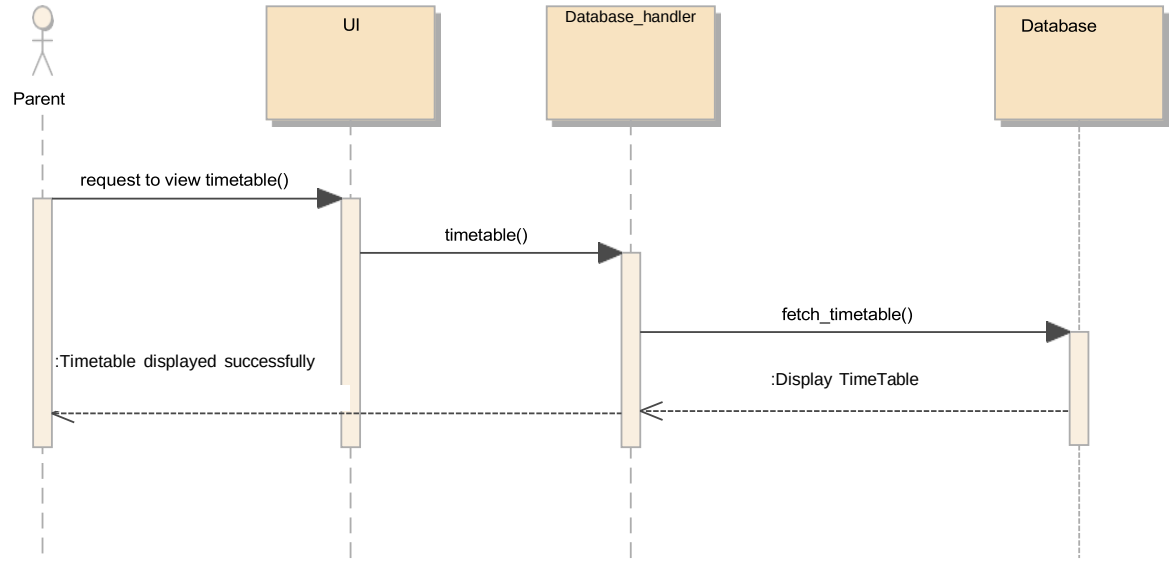


Figure 3.4.3.3 Parent view timetable

3.4.3.4. View Result card

This is the system sequence diagram of the view result card use case it shows the whole process how the parent extract information from UI and input through UI. How theUI extract the data from Database handler. It also display us a sequence of interaction of all the process

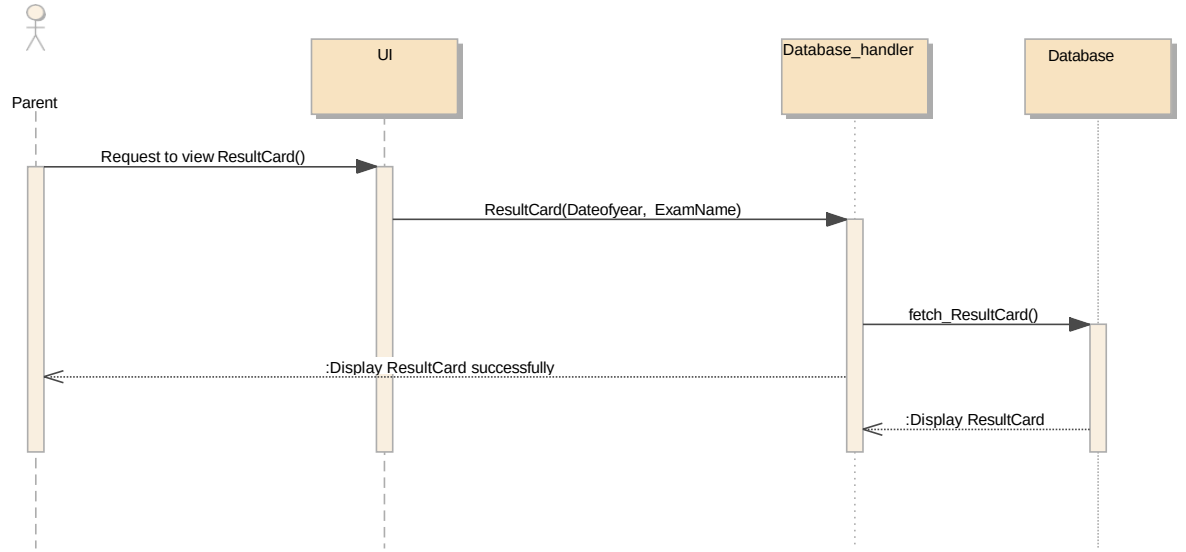


Figure 3.4.3.4 Parent view result card

3.4.3.5. Internal Message

This is the system sequence diagram of the chat box use case it shows the whole process how the parent extract information from UI and input through UI. How the UI extract thedata from Database handler. It also display us a sequence of interaction of all the process

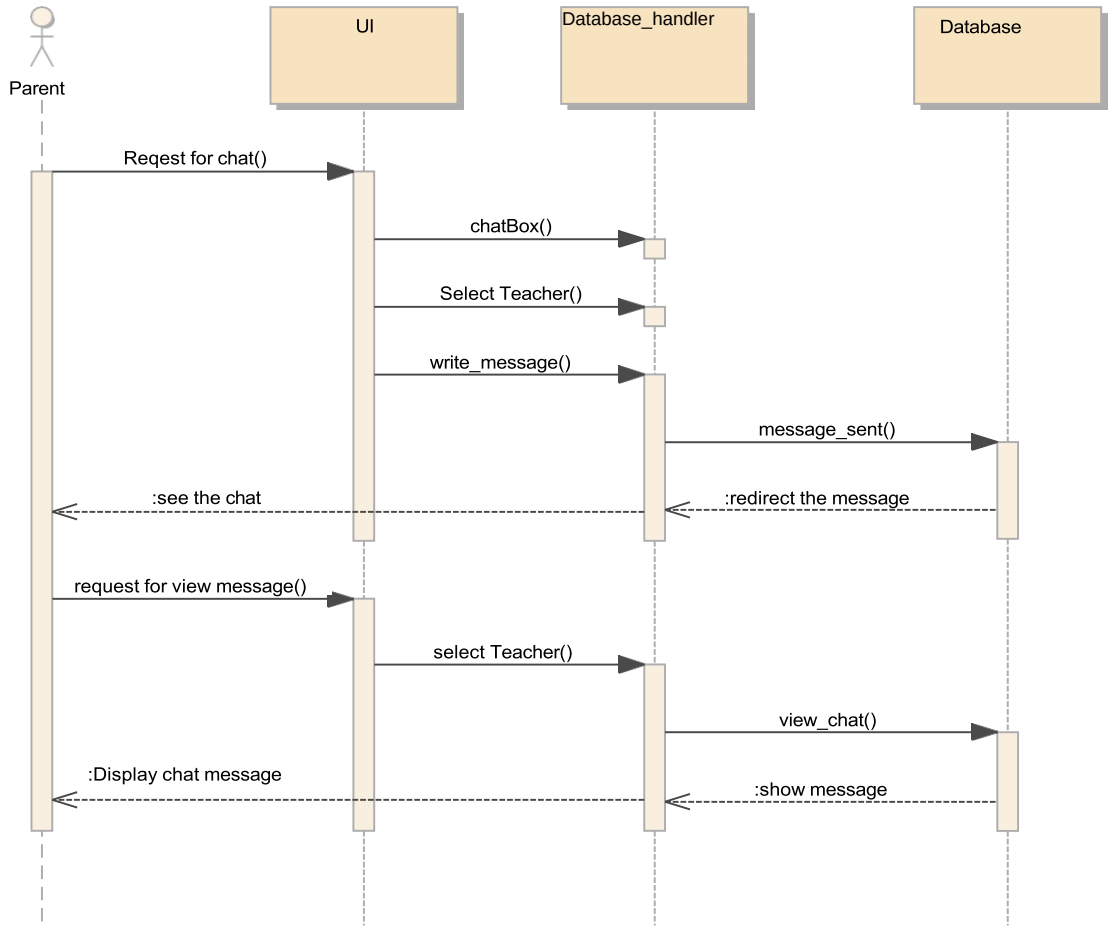


Figure 3.4.3.5 Parent view chat box

3.4.4. Student Sequence Diagram

3.4.4.1. View Notification

This is the system sequence diagram of the view notification use case it shows the whole process how the student extract information from UI and input through UI. How theUI extract the data from Database handler. It also display us a sequence of interaction of all the process

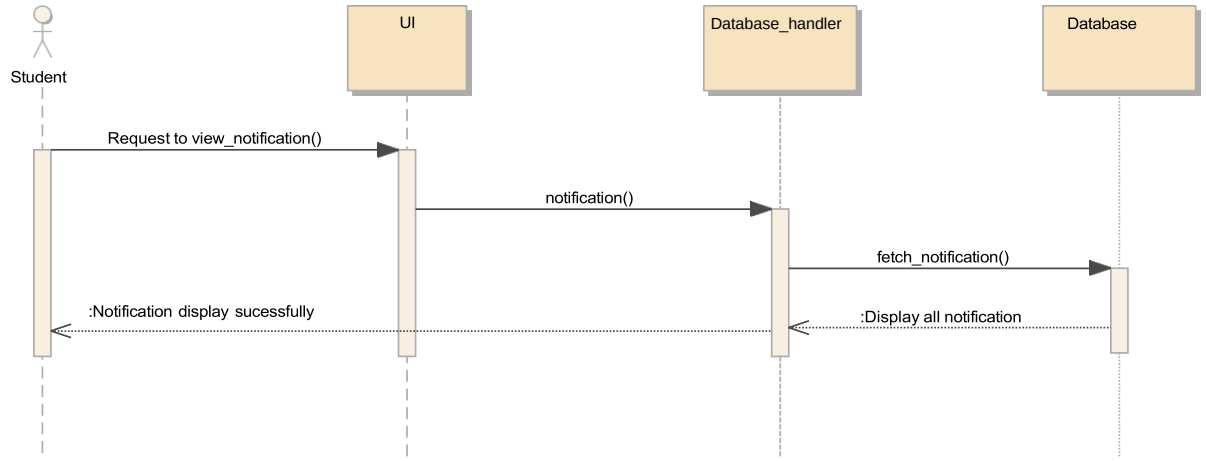


Figure 3.4.4.1 Student view notification

3.4.4.2. View Attendance

This is the system sequence diagram of the view attendance use case it shows the whole process how the student extract information from UI and input through UI. How theUI extract the data from Database handler It also display us a sequence of interaction of all the process

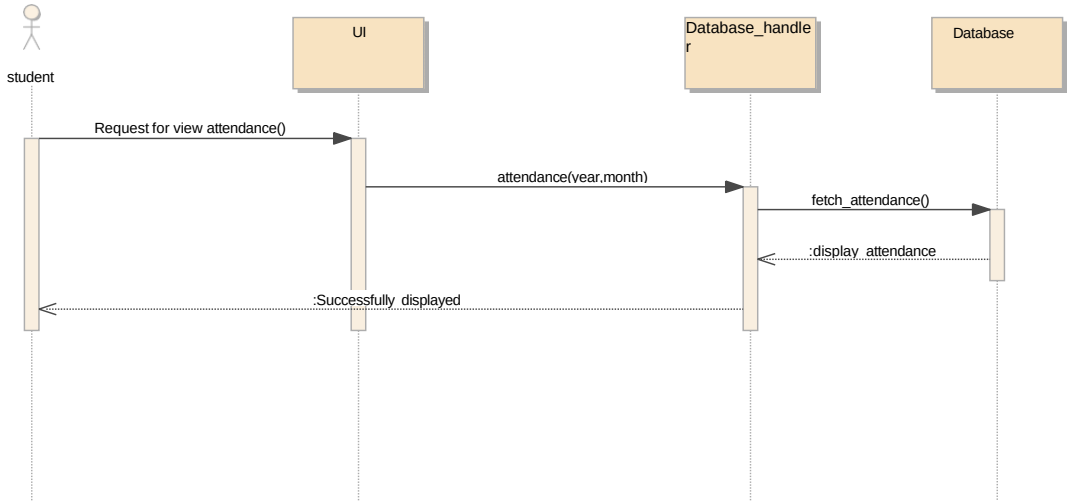


Figure 3.4.4.2 Student view notification

3.4.4.3. View Timetable

This is the system sequence diagram of the view timetable use case it shows the whole process how the student extract information from UI and input through UI. How theUI extract the data from Database handler. It also display us a sequence of interaction of all the process

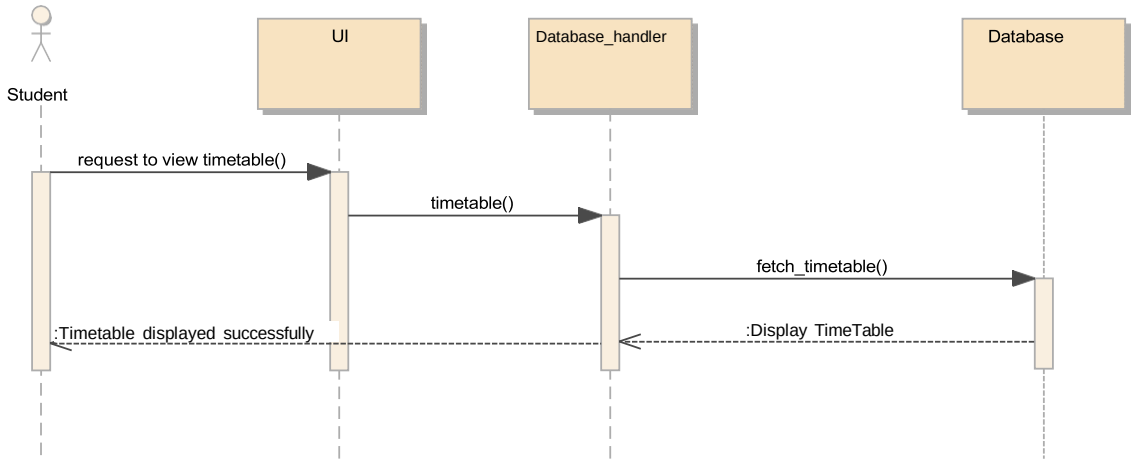


Figure 3.4.4.3 Student view timetable

3.4.4.4. View Result card

This is the system sequence diagram of the view result card use case it shows the whole process how the student extract information from UI and input through UI. How theUI extract the data from Database with the help of student Controller. It also display us a sequence of interaction of all the process

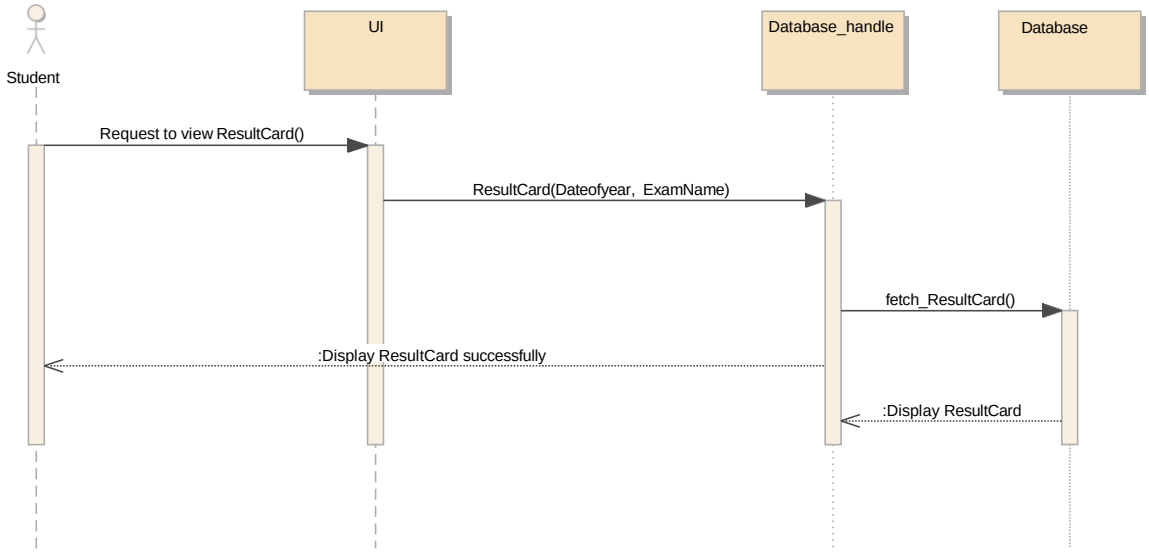


Figure 3.4.4.4 Student view result card

3.5. Interface design

3.5.1. Login

This interface will show login page

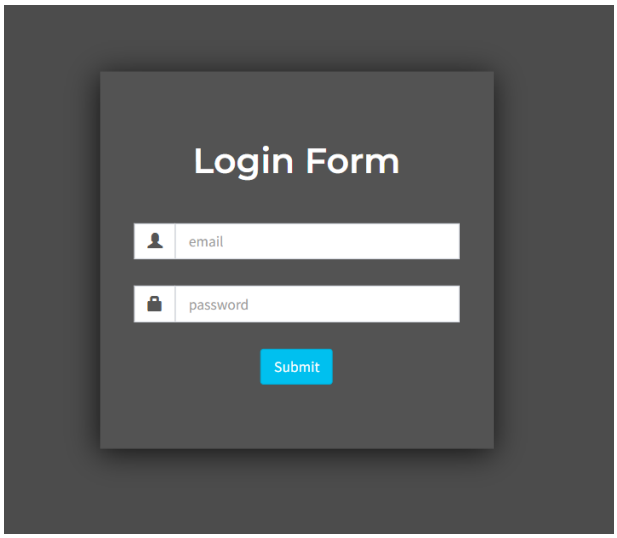


Figure 3.5.1 Login Interface

3.5.2. Admin Profile

This interface will show admin profile

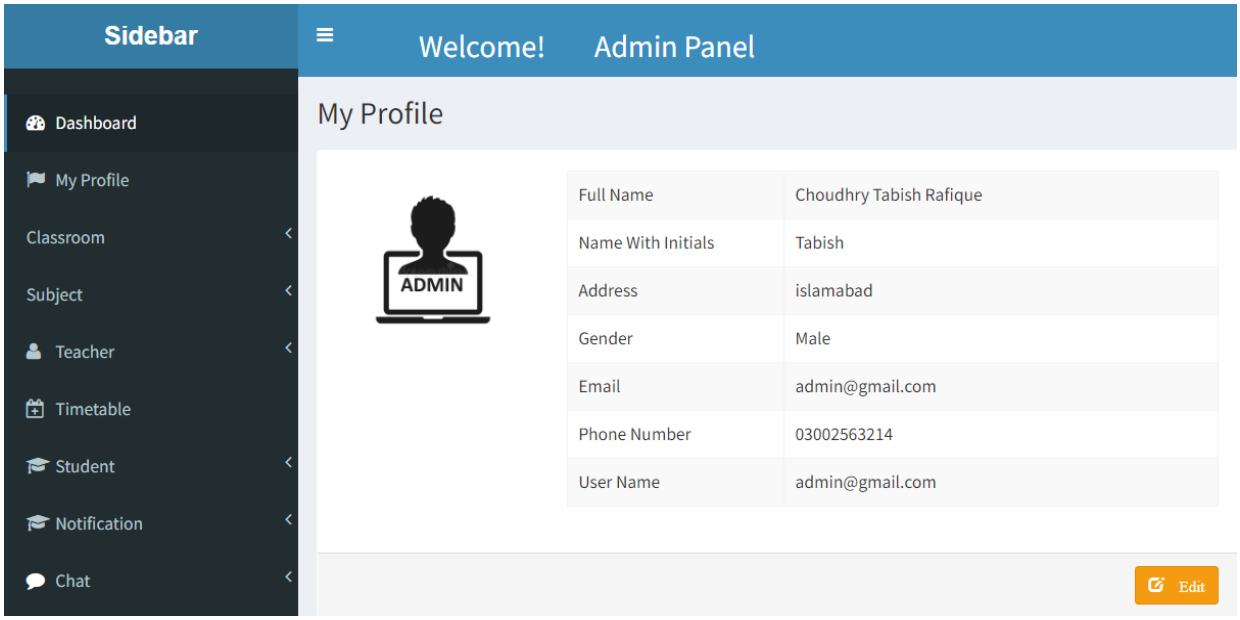


Figure 3.5.2 Admin profile Interface

3.5.3. Teacher Register

This interface will show teacher registration form.

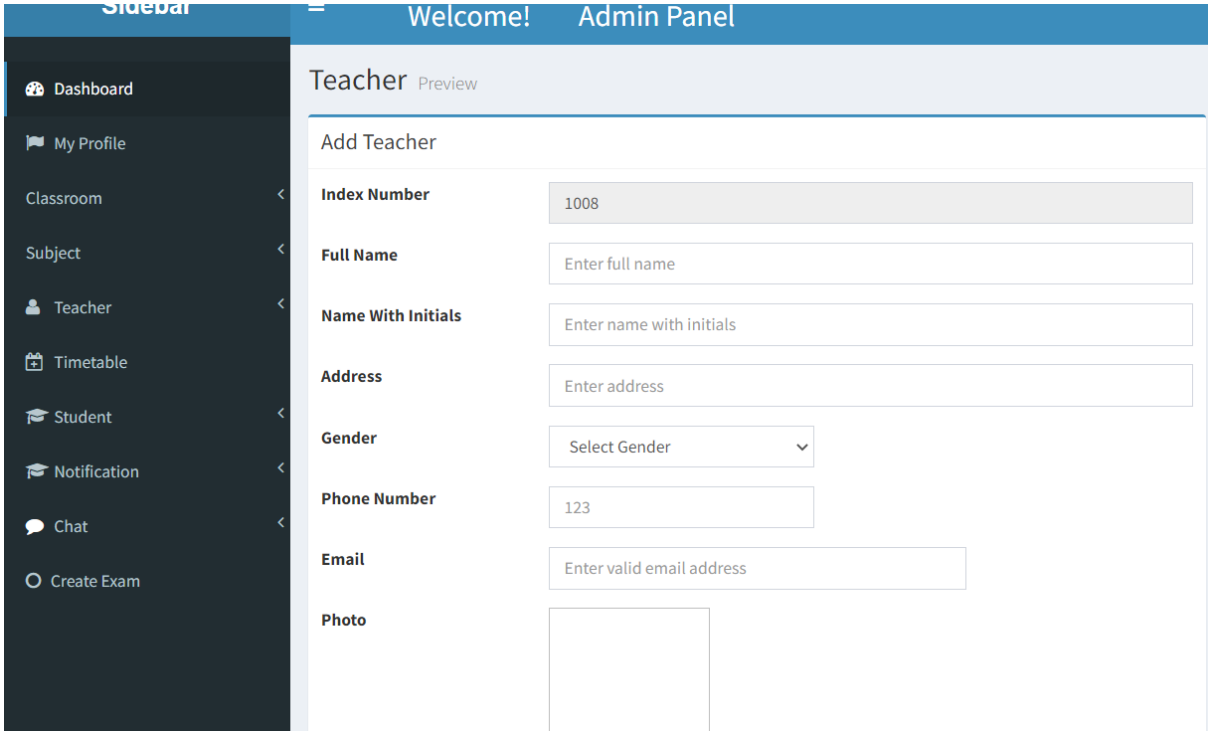


Figure 3.5.3 Teacher register Interface

3.5.4. Show Timetable

This interface will show display timetable of grade

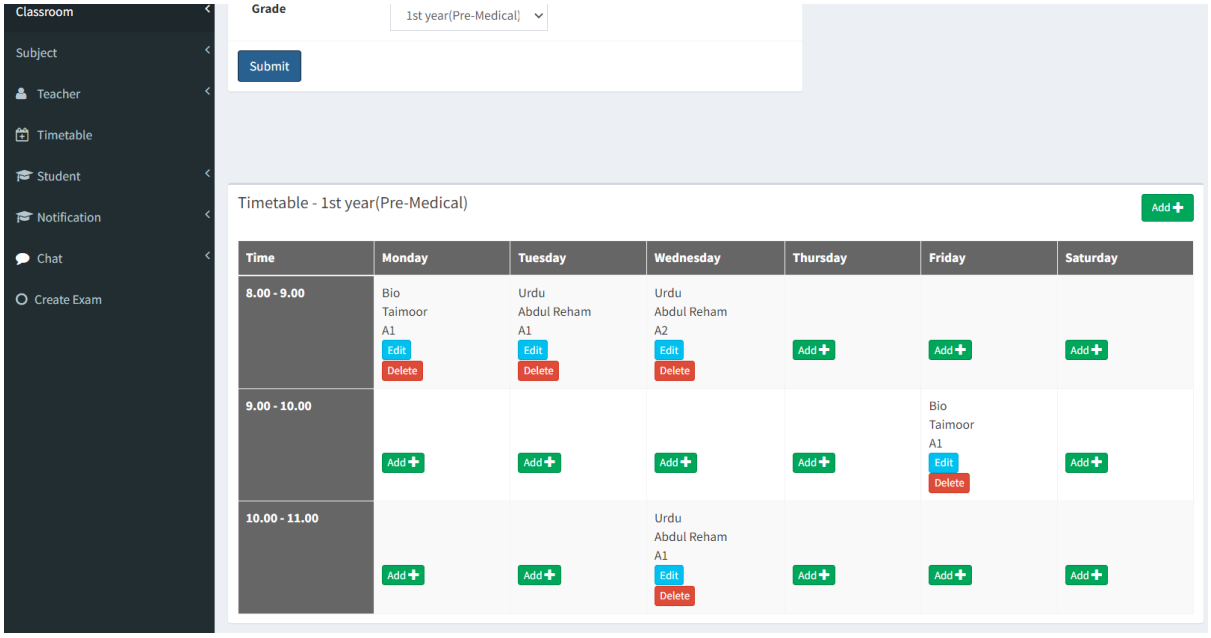


Figure 3.5.4. Timetable show Interface

3.5.5. Student register form

This interface will show student and parent registration form.

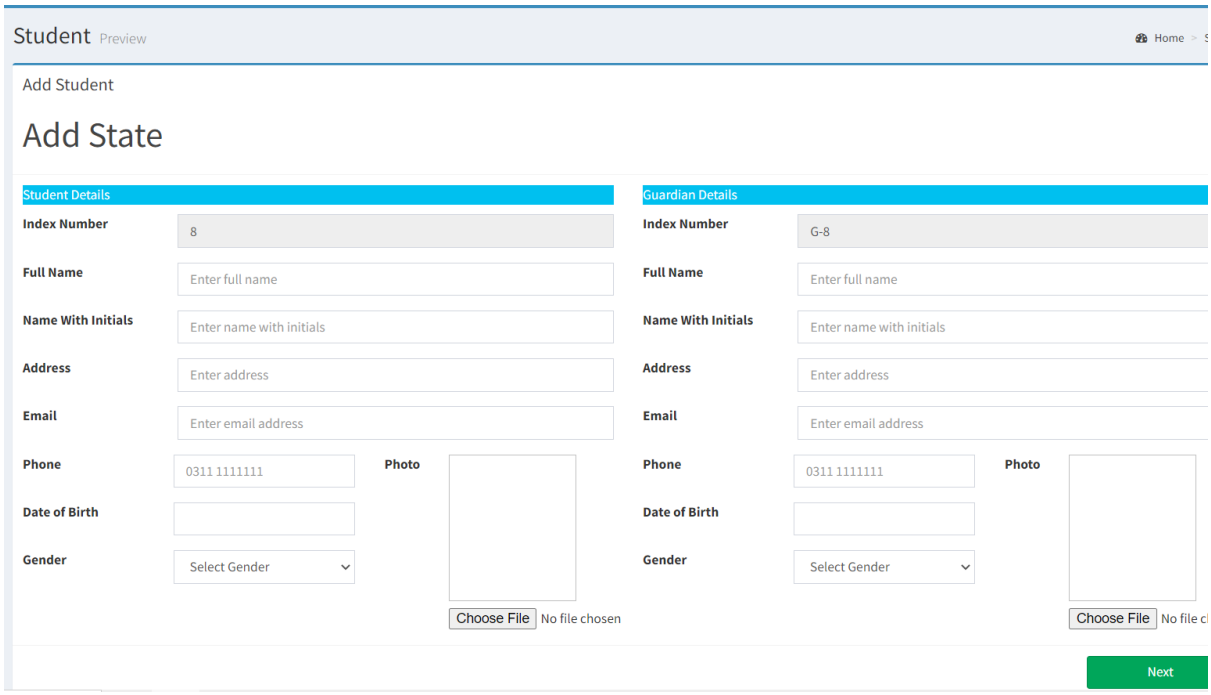


Figure 3.5.5. Student register Interface

3.5.6. Notification form

This interface will show add notification form.

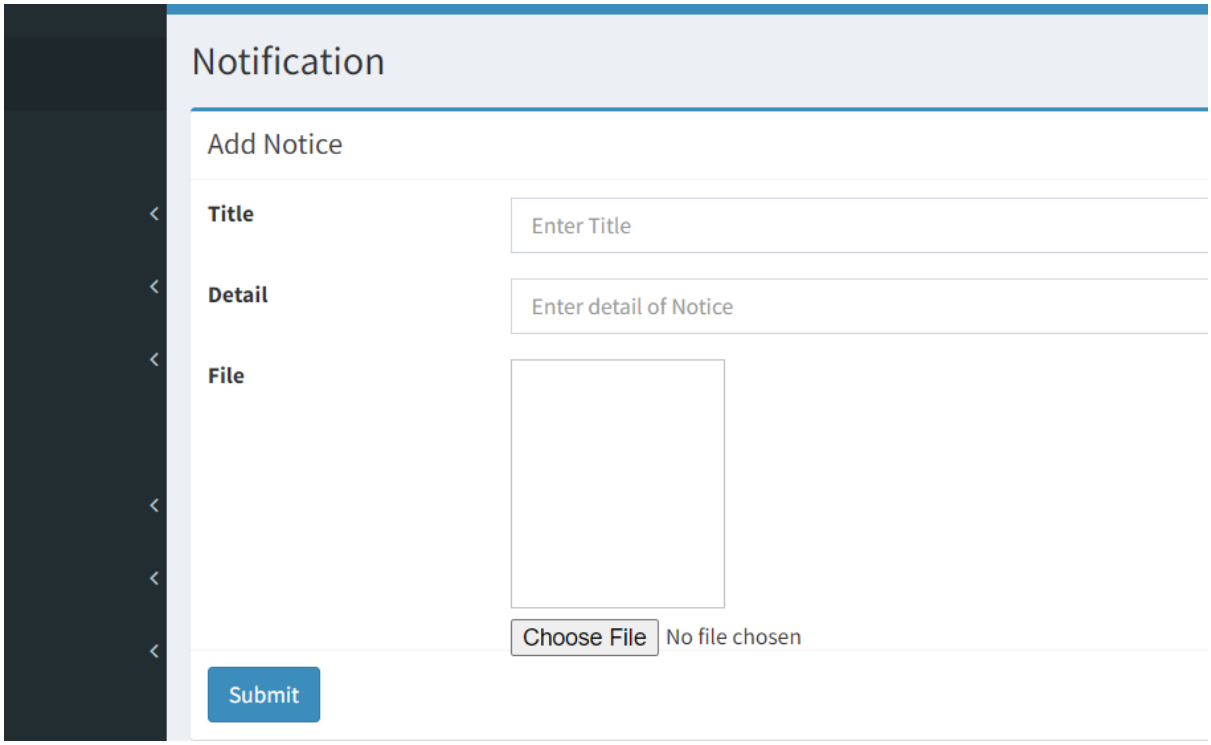


Figure 3.5.6.Notification add Interface

3.5.7. Teacher Dashboard

This interface will show teacher dashboard page

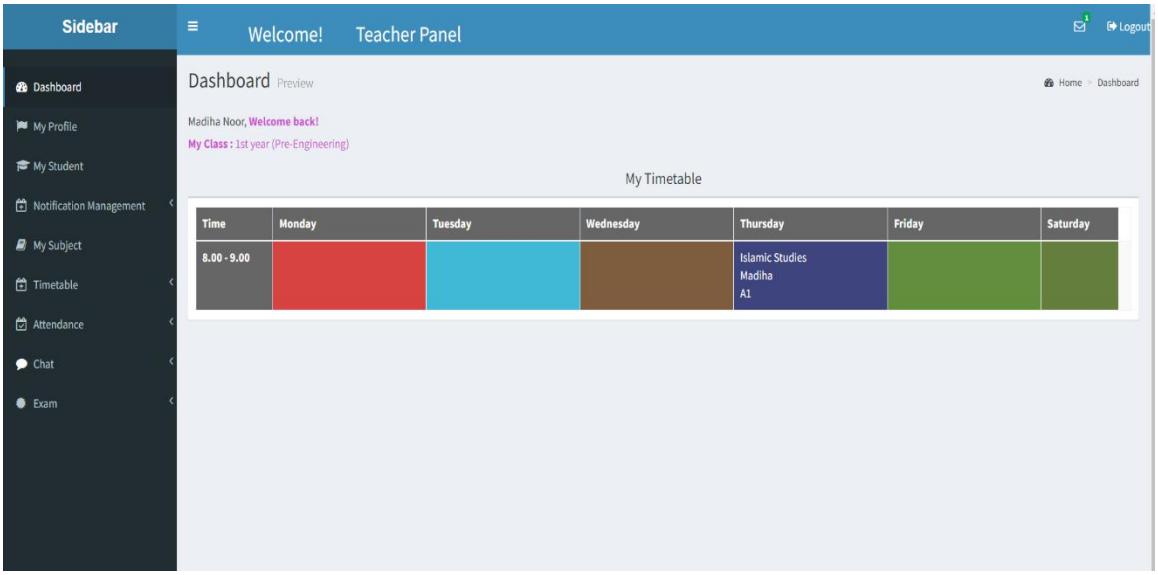


Figure 3.5.7 Teacher dashboard Interface

3.5.8. Result card

This interface will show student result card

2023 - Final Term - Exam

1st year(Pre-Medical)

Exam Marks

ID	Subject	Total Marks	Obtain Marks	Grade
1	Urdu	100	50	C
2	chemistry	100	99	A+
3	English	100	44	C
4	Islamic Studies	100	88	A
5	Physics	100	70	B
6	Mathematics	100	33	F
Total Marks		**384** out of **600**		
Percntage		**64 %**		

Figure 3.5.8 Result card Interface

3.5.9. Chat Box

This interface will show chat box form and display chat user

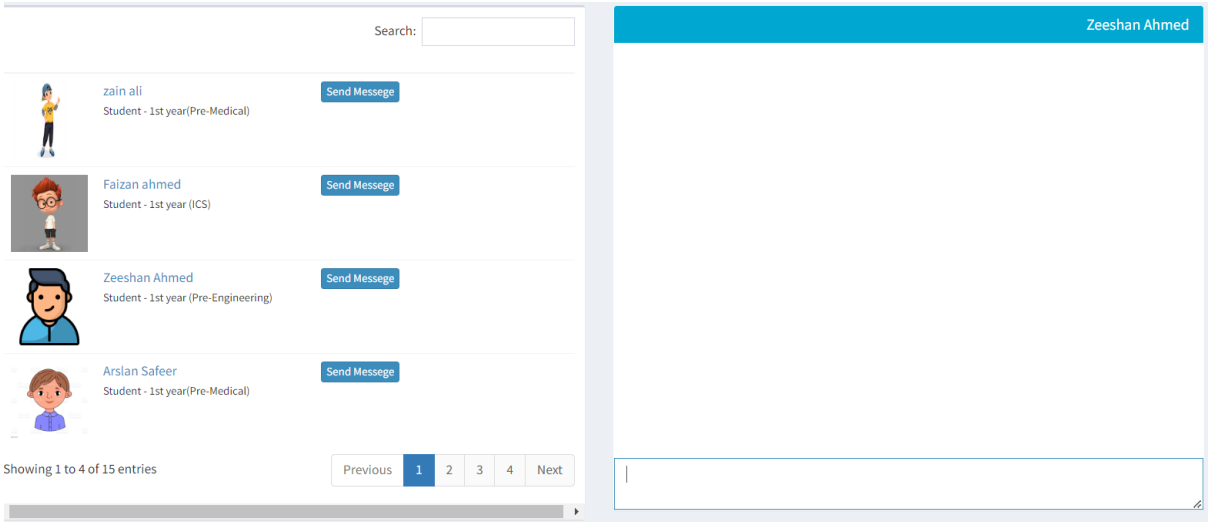


Figure 3.5.10 Chat box Interface

Chapter 4

Software Testing

Software Testing is the most crucial part of Software Development Process. It is the investigation or evaluation of a software component, improving them, and finding bugs and defects. Testing is usually done by executing a system in such a way that it identifies any gaps, errors, or missing requirements in contrary to the actual requirements

4.1. Testing Methodology

It is essential to have a testing plan in place to ensure that the product delivered is robust and stable, and delivered on a predictable timeline. We have used unit testing in our testing phase.

4.1.1. Unit Testing

It is a type of software testing where individual units or components of a software are tested. The purpose is to validate that each unit of the software code performs as expected. Unit Testing is done during the development (coding phase) of an application by the developers. Unit Tests isolate a section of code and verify its correctness. A unit may be an individual function, method, procedure, module, or object. We have used this because unit tests help to fix bugs early in the development cycle and save costs. Unit tests exercise a small piece of functionality within a system. Typically, a test runs individual functions against known inputs, with the results verified against expected results. It helps the developers to understand the testing code base and enables them to make changes quickly Good unit tests serve as project documentation Unit tests help with code re use. Migrate both your code and your tests to your new project.

4.2.Test Case

4.2.1. Login

Table 4.2.1: Login Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: login	Test ID:1
Version:2	Test Type: Unit testing
Input: Enter Email = admin@gmail.com Enter Password = 12345	
Expected Result: Login successfully	
Actual Result: pass	

Table 4.2.1: Login Test Case 2

Date: 02-11-2022	
System: College portal system	
Objective: login	Test ID:2
Version:2	Test Type: Unit testing
Input: Enter Email = admin3223@gmail.com (Wrong email) Enter Password = 12345 (Wrong password)	
Expected Result: Login failed	
Actual Result: fail	

4.2.2. Registration

Table 4.2.2: Registration Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: Registration	Test ID:1
Version:2	Test Type: Unit testing
Enter index_number = 12 Enter name = tabish Enter email = tabish@gmail.com Enter address = Islamabad Enter phoneNo = 236 2323156 Enter DOB = 12/02/2000 Enter Gender = Male	
Expected Result: Registration successfully	
Actual Result: pass	

Table 4.2.2: Registration Test Case 2

Date: 02-11-2022	
System: College portal system	
Objective: Registration	Test ID:1
Version:2	Test Type: Unit testing
Enter index_number = 12 Enter name = qasim Enter email = tabs&&gmail.com (Wrong email) Enter address = Islamabad Enter phoneNo = 212122 (Wrong formatting) Enter DOB = 12/02/2000 Enter Gender = Male	
Expected Result: Registration failed	
Actual Result: fail	

4.2.3. Generate Notification

Table 4.2.3: Generate Notification Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: Generate Notification	Test ID:1
Version:2	Test Type: Unit testing
Input: Enter Title name = Online classes Enter detail = Thursday will be online classes Select grade = Grade 3 Select documents = Notice.pdf	
Expected Result: Generate Notification successfully	
Actual Result: pass	

Table 4.2.3: Generate Notification Test Case 2

Date: 02-11-2022	
System: College portal system	
Objective: Generate Notification	Test ID:2
Version:2	Test Type: Unit testing
Input: Enter Title name = Online classes Enter detail = Thursday will be online classes Select grade = (No select grade) Select documents = Notice.pdf	
Expected Result: Generate Notification failed	
Actual Result: fail	

4.2.4. Generate Timetable

Table 4.2.4: Generate Timetable Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: Generate Timetable	Test ID:1
Version:2	Test Type: Unit testing
Input: Select Grade = Grade 1 Select teacher = Inayiat Ullah Select day = Monday Enter Time = 8:00 – 9:00 Select subject = Math	
Expected Result: Generate Timetable successfully	
Actual Result: pass	

Table 4.2.4: Generate Timetable Test Case 2

Date: 02-11-2022	
System: College portal system	
Objective: Generate Timetable	Test ID:2
Version:1	Test Type: Unit testing
Input: Select Grade = Grade 1 Select teacher = Inayiat Ullah Select day = Monday Enter Time = 8:00 – 9:00 Select subject = Math (No select password)	
Expected Result: Generate Timetable failed	
Actual Result: fail	

4.2.5. Generate Result Card

Table 4.2.5: Generate Result card Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: Generate result card	Test ID:1
Version:2	Test Type: Unit testing
Input: Select Grade = Grade 1 Select Student = Zaka ullah Add Subject marks = 100 / 80	
Expected Result: Generate result card successfully	
Actual Result: pass	

Table 4.2.5: Result card generate Test Case 2

Date: 02-11-2022	
System: College portal system	
Objective: Generate result card	Test ID:2
Version:2	Test Type: Unit testing
Input: Select Grade = Grade 1 Select Student = arslan safeer Add Subject marks = 500 (Wrong enter marks)	
Expected Result: Generate result card failed	
Actual Result: fail	

4.2.6. Internal Message

Table 4.2.6: Chat Box Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: Internal Message	Test ID:1
Version:2	Test Type: Unit testing
Input: Select user = arslan safeer Enter Message = hey	
Expected Result: Chat successfully	
Actual Result: pass	

4.2.7. Mark Attendance

Table 4.2.7: Attendance Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: Mark Attendance	Test ID:1
Version:2	Test Type: Unit testing
Input: Select Grade = Grade 1 Student Mark = ‘present’, ‘absent’	
Expected Result: Mark Attendance successfully	
Actual Result: pass	

Table 4.2.7.1: Attendance Test Case 2

Date: 02-11-2022	
System: College portal system	
Objective: Mark Attendance	Test ID:2
Version:2	Test Type: Unit testing
Input: Select Grade = Grade 1 Student Mark = ‘present’, ‘absent’,(No Marked)	
Expected Result: Mark Attendance failed	
Actual Result: fail	

4.2.8. View Attendance

Table 4.2.8: Attendance Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: View Attendance	Test ID:1
Version:2	Test Type: Unit testing
Input: Select attendance button Select month	
Expected Result: View Attendance successfully	
Actual Result: pass	

4.2.9. View Timetable

Table 4.2.9: View timetable Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: View timetable	Test ID:1
Version:2	Test Type: Unit testing
Input: Select timetable button	
Expected Result: View timetable successfully	
Actual Result: pass	

4.2.10. View Grade Card

Table 4.2.10: View grade card Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: View grade card	Test ID:1
Version:2	Test Type: Unit testing
Input: Select exam button Select Term e.g. (Mid, final term)	
Expected Result: View grade card successfully	
Actual Result: pass	

4.2.11. View Notification

Table 5.2.11: View Notification Test Case 1

Date: 02-11-2022	
System: College portal system	
Objective: View Notification	Test ID:1
Version:2	Test Type: Unit testing
Input: Select Notification button	
Expected Result: View Notification successfully	
Actual Result: pass	

Chapter 5

Software Deployment

5.1. Installation / Deployment Process Description

Our web application college portal system is deployed on below link

https://collegeportalsystem.000webhostapp.com/

Username and password below:

1) Admin

Username: admin@gmail.com

Password: admin

2) Teacher

Username: madiha@gmail.com

Password: teacher

3) Parent

Username:dad2@gmail.com

Password: student

4) Student

Username: zain@gmail**.com**

Password: parent

Chapter 7

REPORT APPROVAL CERTIFICATE

The report of the project, “College Portal System” has been approved based on the following evaluation guideline.

Project Evaluation Guidelines

Artifacts Guidelines	
Analysis and Design artifacts are syntactically correct (use-case model, Use case description, SSDs, domain model, class diagram, SDs, ERDs)	
Consistency and traceability have been maintained among different artifacts	
General Guidelines	
Formatting (font style, indentation) is according to the FYP template and consistent throughout the document	
Captions are added to all the figures and tables. Figure captions must be placed below each figure, and table captions must be provided above the table	
Each figure or table is followed by some text describing what it represents	

(Mr. Ibrar Arshad)	(Mr.Sheikh badr ud din)	(Ms. Aziya Mehbob)

References

- Johnson, K. A., & Becker, J. A. (n.d.). The whole brain atlas. Retrieved from Harvard University Medical School website: http://www.med.harvard.edu/AANLIB/
- The College of William and Mary. (n.d.). College statement. Retrieved from http://www.wm.edu/about/administration/provost/mission/index.php
- All the Web Pages that we have taken help from must be cited in the references section are blow:
  - https://www.itsolutionstuff.com/
  - https://www.php.net/
  - https://www.w3schools.com/php/
  - https://www.tutorialspoint.com/php/php_web_concepts.htm