



Daffodil
International
University

Project:
University Management System

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This Project documentation has been submitted in fulfillment of the requirement for the Degree of Master of Science in Software Engineering .

APPROVAL

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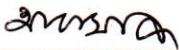
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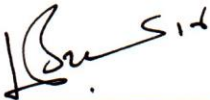
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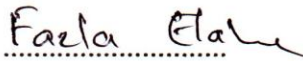
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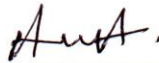
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ACKNOLGMENT

First of all, I want to express that I am really thankful to the almighty Allah providing us the opportunity to finish this project successfully.

I'd like to express my appreciation to my project supervisor, **Dr. Md. Fazla Elahe**, Assistant Professor and Associate Head of the Department of Software Engineering at Daffodil International University. With his help, I was able to finish this project. He gave me a lot of good advice, encouraged me, and kept an eye on me all the time.

I also want to thank each and every teacher in the department. My course teachers not only educate us about software engineering but also morality, ethics, and manners.

I'm also really appreciative of my parents' unflinching support. They always cared about my opinions and offered me suggestions.

ABSTRACT

The University Management System Project is a web-based system that may be used by educational institutions such as colleges and universities. It was developed so that the university and the institutions with which it is linked may carry out, monitor, and evaluate complex operations such as the admission of students, exams, and a great deal more. It is a platform that oversees the whole student life cycle, from enrollment through graduation with their degree.

Important procedures including admission, results processing, registration, and fee administration may be completed more quickly with the use of UMS. All users are given a role-based login and password to accomplish their jobs, including students, staff from colleges and universities, paper value's, setters, and moderators.

Admin may oversee the Entire University System Can add staff and students by assigning them each a unique ID; after registration, admin can do each account to activate; can add courses and assign teachers for those courses along with groups of students on those courses; can add student fees; and can upload exam results and take student attendance.

Staffs are able to submit test results, record student attendance, and see attendance information and current course materials.

Student may use their own student portal to see their attendance status, fee details, the results, and current courses.

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Chapter One

Introduction

1.1 Project summer

Now that we have access to supercomputers, their utilization would be advantageous in all disciplines of endeavor. However, digital certifications are now an integral element of the infrastructure of any organization. Because it provides security and can differentiate individuals. Additionally, users may have access to secure messaging.

In order to ensure minimum standards are met and to aid in strategic planning, universities should share data regarding student registration, courses, and staff at the administrative level. The UMS was created as a means to bypass these difficulties and boost productivity without relying on paper.

Employee and student registration, attendance tracking, and access to test results are all top priorities for the University Management System under development.

The UMS focuses heavily on facilitating employee and student enrollment, attendance recording, and exam result access also teacher attendances, and student fee

1.2 Project Goals

The major purpose of this project, as suggested by the name "University Management System," is to provide an automated system to help institutions lessen the burden of manually managing students, professors, courses, classes, attendance, and outcomes. That's why it's critical that we launch this initiative.

1.3 Background

The lack of a system to manage students' registration, exam results, and attendance caused us a lot of problems when I was a student at a university in my country before I learned programming language, so when I did learn it, I questioned, Can you create any application for that university given how well I understand their requirements?

1.4 Advantages & Beneficiaries

For some viewpoints, our system would be useful. I will now list those below:

Our system assists the university in a number of ways, including:

- I. Managing student registration;
- II. managing courses at the university and assigning teachers to them
- III. managing classes managing faculties and courses;
- IV. managing teachers and staff facilitating the online submission of exam results
- V. Managing class attendance and assisting students in achieving their academic goals.

I've also listed several advantages in addition to certain beneficiaries. As a result, I think this system will be great for universities.

1.5 Goals

The creation of a web-based application is one of the key objectives of this project.

- Students should be able to access their portals at all times, and staff, faculty, departments, courses, results, and attendance may all be tracked online by using the program that is accessible over the internet.

1.6 Stakeholder

- University System Admin



- Staff/Teacher



- Student



- **The admin:** may oversee the Entire University System.
Can add staff and students by assigning them each a unique ID; after registration, admin can do each account to activate; can add courses and assign teachers for those courses along with groups of students on those courses; can add student fees; and can upload exam results and take student attendance.
- **Teachers:** are able to submit test results, record student attendance, and see attendance information and current course materials.
- **Students:** may use their own student portal to see their attendance status, fee details, the results, and current courses.

1.7 Gantt chart

Gantt charts manage production. We have to do our tasks in time. Software development uses it most. Our project's Gantt chart is here.

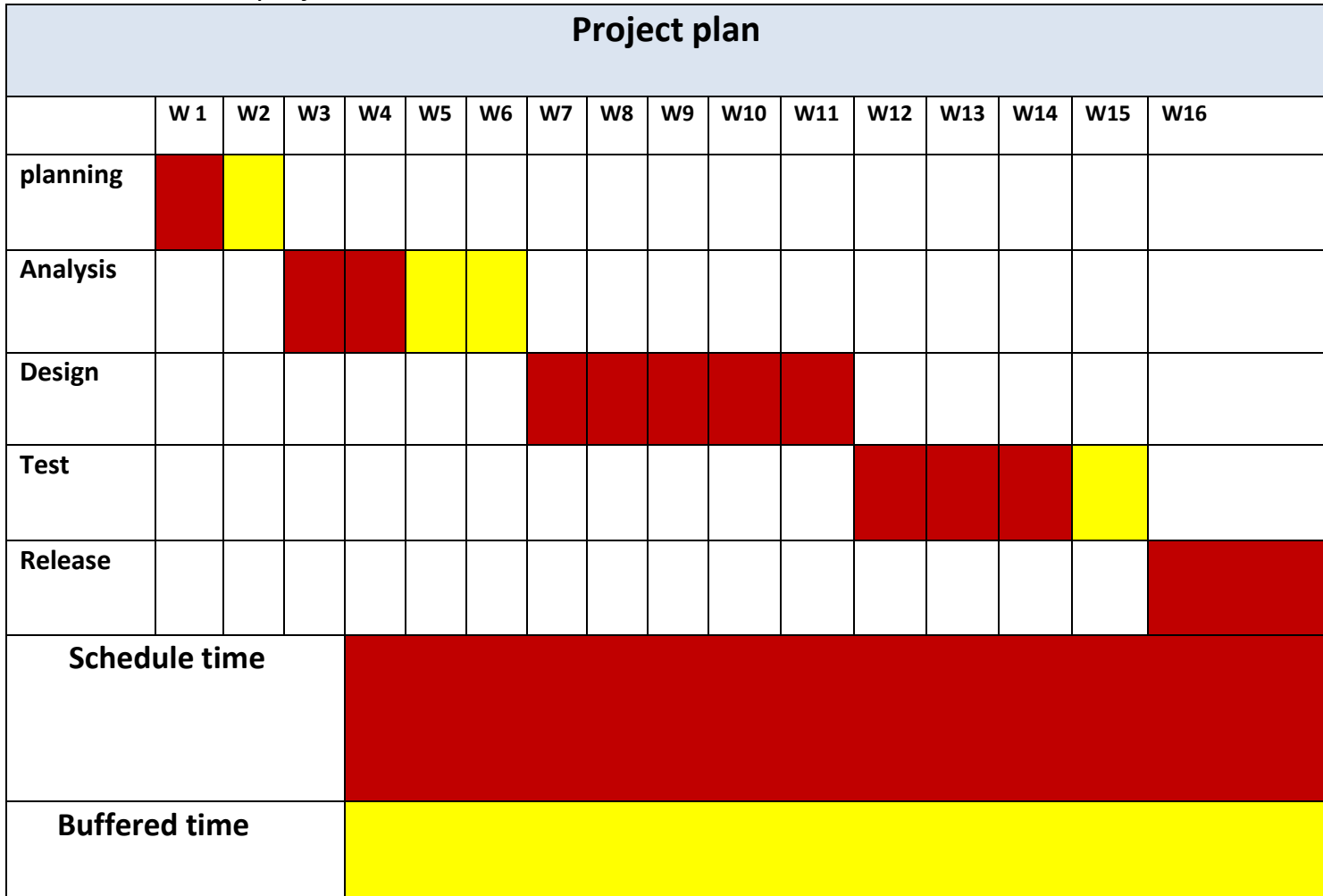


Figure 1.7 Gantt chart

CHAPTER TWO

Specification of the software requirements

2.1 Functional requirement

Performing these functional preconditions is necessary for the system to operate as intended. The functional requirements must be met by the software system. There are essential performance standards that any system must meet. We will now talk about our project's functional needs.

2.1.1 Teacher Registration

Requrment1	User Registration
Description	Admin may register are new users like academics and other system administrator
Stockholder	Administrator

2.1.2 Student Registration

Requrment2	Student Registration
Description	Administrators who are new users, such student and other system administrators, may register.
Stockholder	Administrator

2.1.3 Course Registration

Requrment3	Course Registration
Description	Administrators who are new courses, such as academicsand other system administrators, may register.

Stockholder	Administrator
--------------------	---------------

2.1.4 Class Registration

Requrment4	Class Registration
Description	Administrators who are new users, such as academics and other system administrators, may register.
Stockholder	Administrator

2.1.5 Student Attendance

Requrment	Student Attendance
Description	Using a student's id, the administration and teachers are able to take class attendance data.
Stockholder	Administrator and Teacher

2.1.6 Teacher Attendance

Requrment6	Teacher Attendance
Description	Administrators can record a teacher's presence by using his or her ID number.

Stockholder	Administrator
-------------	---------------

2.1.7 Time Table

Requrment7	Time table
Description	Each course and subject's timetable and days can be managed by the administrator.
Stockholder	Administrator

2.1.8 Student Fee

Requrment8	Student fee
Description	Admin can add student fees using student ID for each student.
Stockholder	Administrator

2.1.9 Teacher attendance report

Requrment9	Class attendance
Description	A teacher's attendance report may be calculated as a percentage and shown on the portal.
Stockholder	Teacher

2.1.10 Students Result

Requrment10	Students Result
Description	Admin and teachers are able to add student results by using the student id.
Stockholder	Teacher/Admin

2.1.11 Student login

Requrment11	Student login
Description	students can login using their student ID and password after registering
Stockholder	students

2.1.12 Student Attendance status

Requrment12	Student attendance status
Description	The student's student portal will display an attendance report calculated as a percentage.
Stockholder	students

2.1.13 Student Result view

Requrment13	Student Result view
Description	The student portal will show the grades for each subjects and calculate the CGBA.
Stockholder	students

2.2 Non-functional requirement

2.2.1 Performance

The continued operation of a program is essential. To ensure dependability, we must continue to take extra precautions. I will now discuss many potential approaches we might take to enhance the task's efficiency.

2.2.2 Capacity

We have to be allowed to deal with data from users, deliver accurate data, perform https requests, deal with databases, etc. using the software we design.

2.2.3 Acceptability and maintainability

The provision of post-sale assistance or after-sales to customers is crucial.

2.2.4 Timing and speed

When an administrator needs to make changes to student records or a teacher needs to check attendance, the search results must load immediately.

2.2.5 Supportability

Needs for feasibility may have been connected to various extents. Like:

- Testability and supportability

- Extensibility
- Adaptability
- Maintainability

Criteria might be seen as connected in some ways. Like:

- Install ability
- Serviceability

2.2.6 Security

Security requirements should be a primary consideration while developing software. Software protection ensures the safety of a program or system. Quickly testing and observing software security features is possible.

Every component of the system provides a single means of authentication.

Access to the system requires a centralized authentication mechanism, and this must be provided.

2.2.7 The accessibility

Our software system still supports a wide variety of authorizing and authenticating mechanisms. We'll take contributions from wherever in our system.

2.2.8 Integrity

A security system that guarantees a standard of data quality is referred to as having integrity obligation we shall keep user passwords in an encrypted manner that cannot be encrypted.

2.2.9 Privacy

The protection of system user's personal information is crucial. Enhancements to privacy regulations are made to safeguard stakeholder confidentiality. The anonymity should be used to safeguard the central database in order to maintain privacy.

2.2.10 Interaction with humans and usability

Making a system user-friendly and simple to understand for the end users is the primary goal of the creation of the system.

CHAPTER THREE

Analysis of Requirements

3.1 USE CASE Diagram

The admin: may oversee the Entire University System.

Can add staff and students by assigning them each a unique ID; after registration, admin can do each account to activate; can add courses and assign teachers for those courses along with groups of students on those courses; can add student fees; and can upload exam results and take student attendance.

Teachers: are able to submit test results, record student attendance, and see attendance information and current course materials.

Students: may use their own student portal to see their attendance status, fee details, the results, and current courses.

3.2 Use Case Diagram



Figure 3.2 Use case diagram

3.1.1 Active diagram

In accordance with our use case, we created a few active diagrams. These activity diagrams accurately depict the progression of each of the task's unique criteria.

3.1.2 Student Registration

The admin registers all students, who must have a unique ID and Reg-NO, and the registrar must select faculty, department, class, semester, and courses.

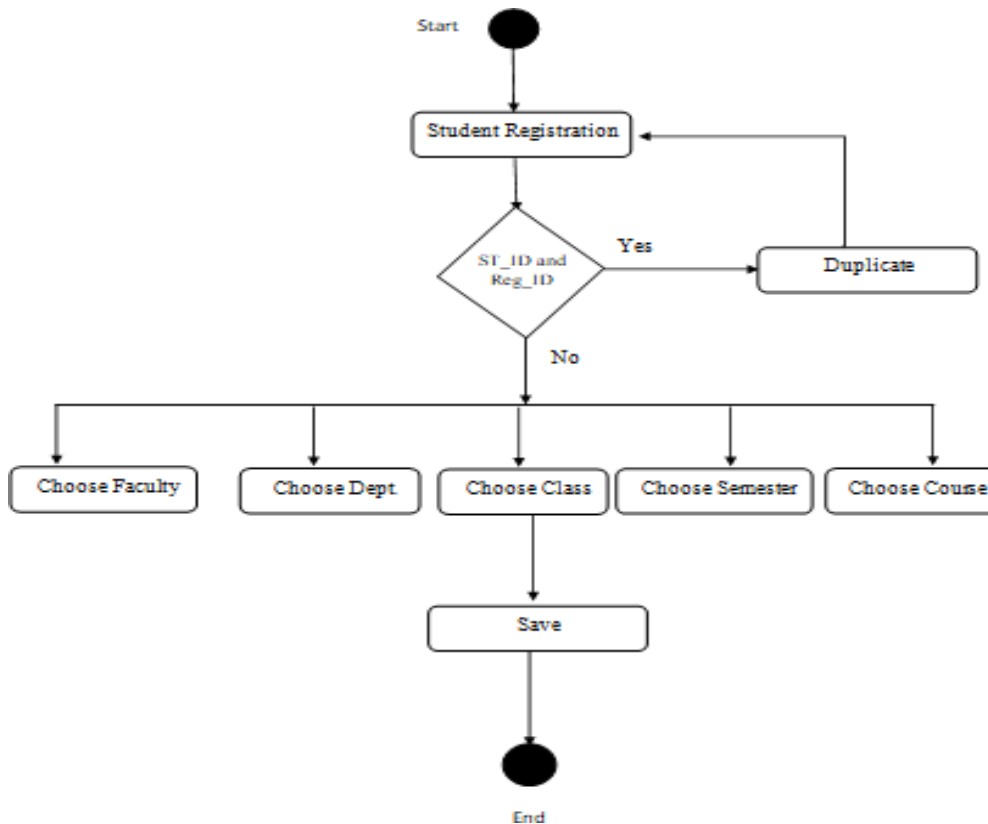


Figure 3.1.2 student Registration

3.1.3 Class Registration

The registration process involves the administration choosing a student's Faculty, Department, and Classes so that the student is aware of his or her course schedule. We will register all university departments simultaneously; if a department is added later, we may easily add it.

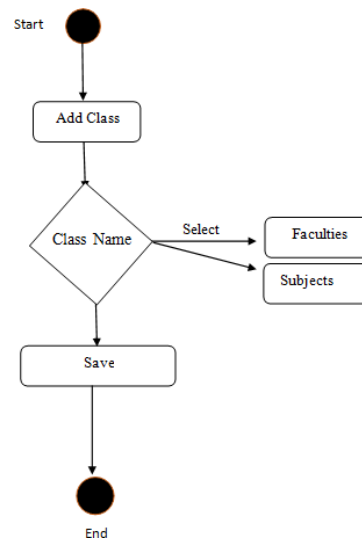


Figure 3.1.2 class registration

3.1.4 Course Registration

The purpose of course registration is to record the courses that will be taught throughout the semester, to match each course with its respective instructor, department, class, and academic term, and to designate a specific teacher for each subject.

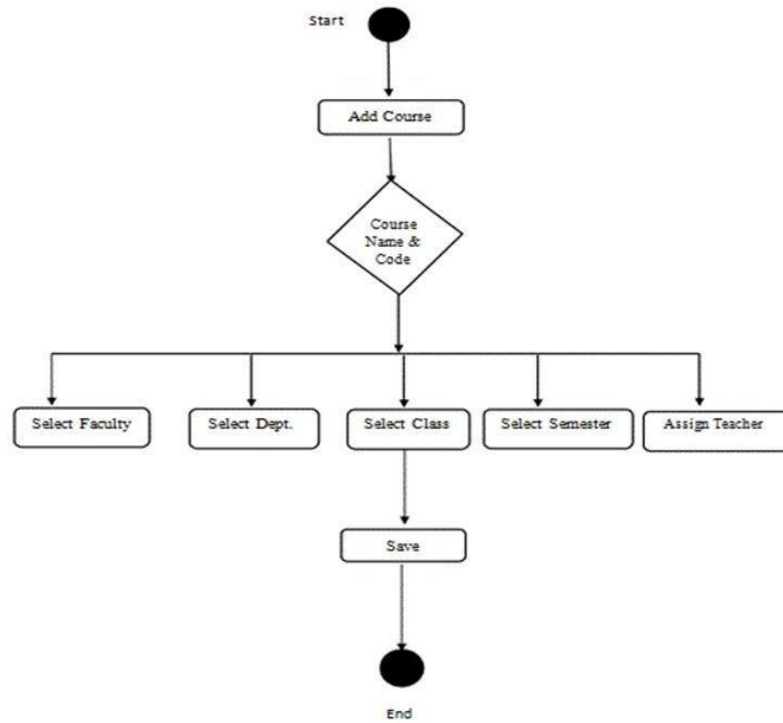


Figure 3.1.4 course registration

3.1.5 Teacher Registration

New teachers are given login credentials—a combination of letters and numbers—by the Administrative so that they may access their own dashboards and perform tasks like managing students' grades and attendance.

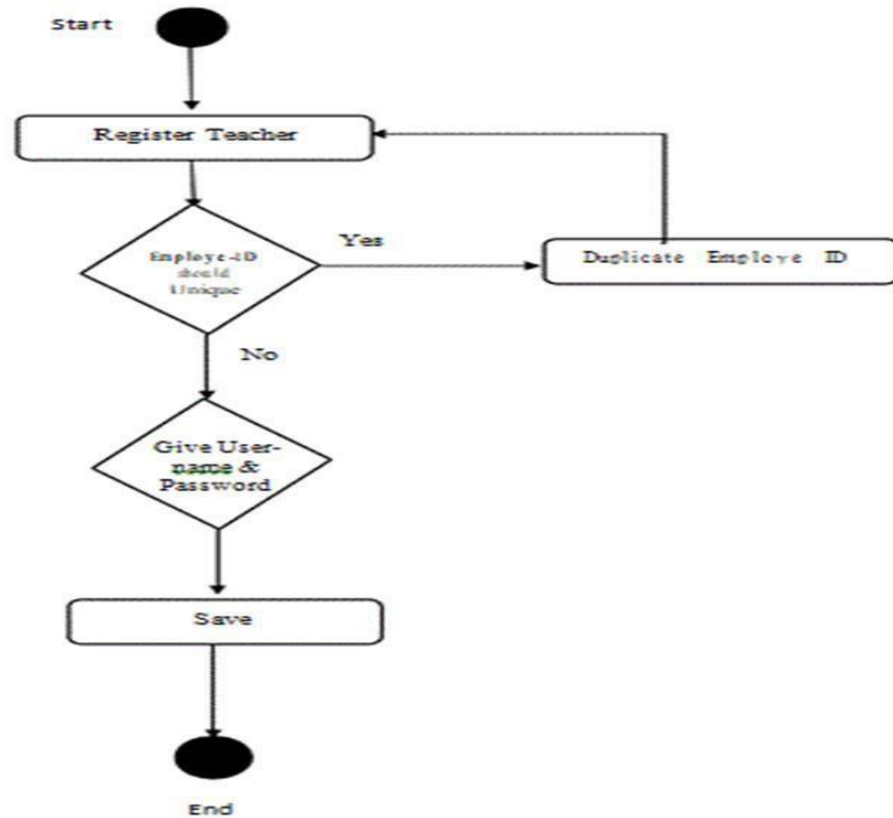


Figure 3.1.5 Teacher registration

3.1.6 Time Table

Each course and subject's timetable and days can be managed by the administrator.

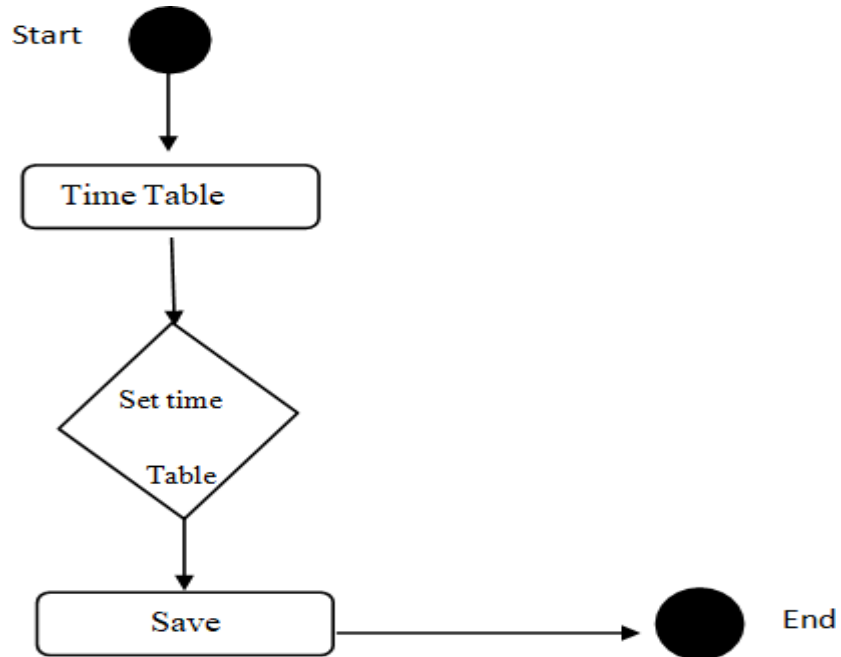


Figure 3.1.6 Time table

3.1.7 Teacher taking attendance

Using a student's id, teachers are able to take class attendance data

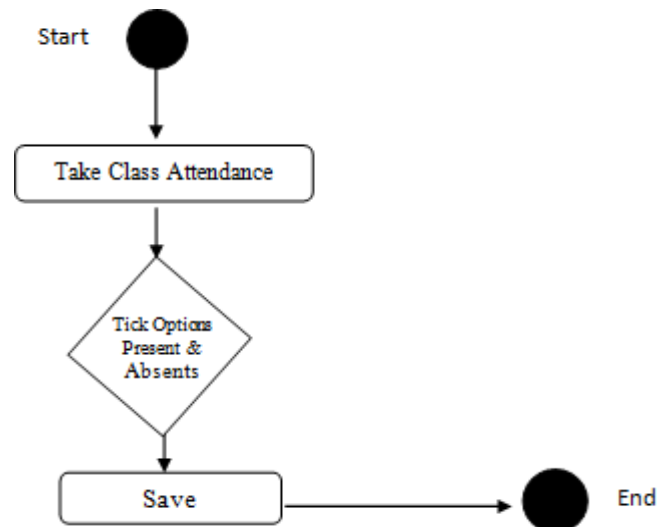


Figure 3.1.7 Teacher taking attendance

3.2 Sequence Diagram

Sequence diagrams are very useful for pinpointing where and how each system will handle data. A few sequence diagrams will be shown presently.

3.2.1 Teacher Registration

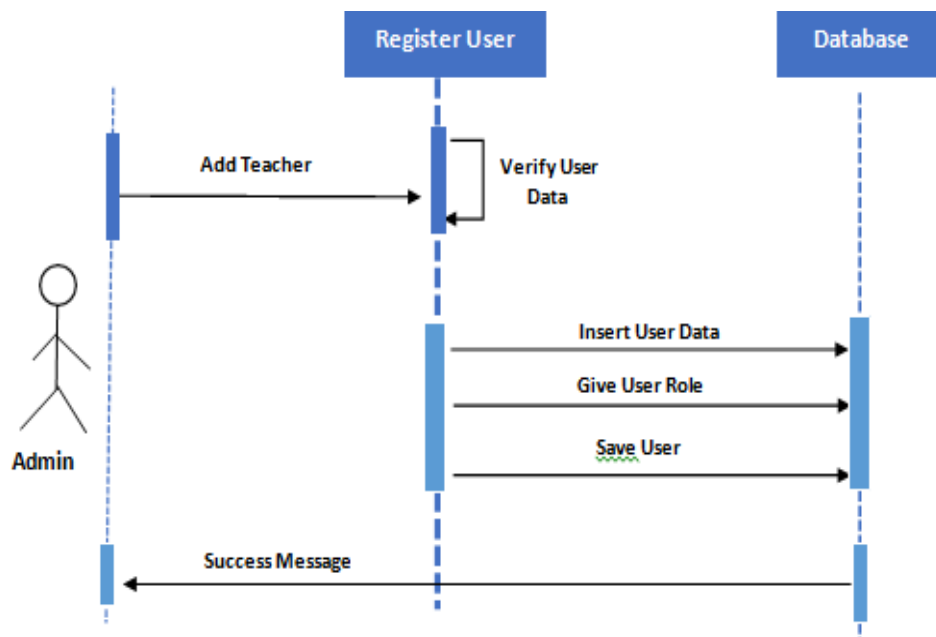


Figure 3.2.1 Teacher registration

3.2.2 Student Registration

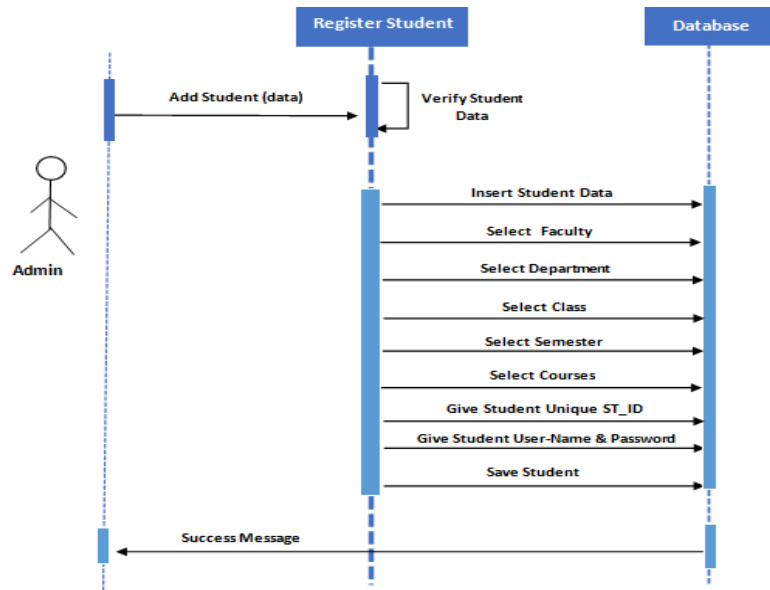


Figure 3.2.2 Student registration

3.2.3 Course Registration

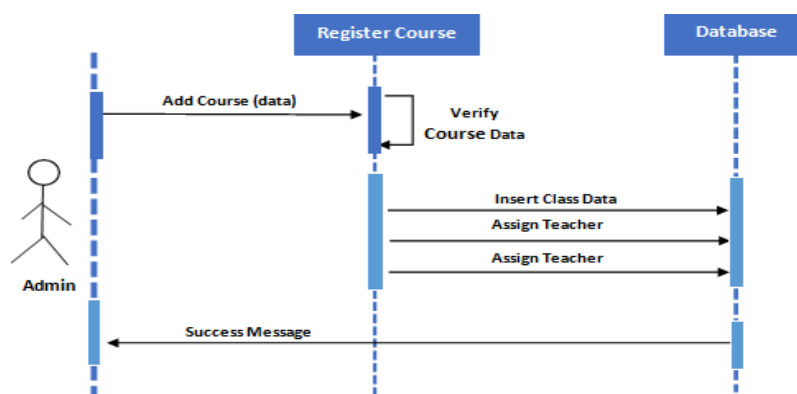


Figure 3.2.3 course registration

3.2.4 Time table

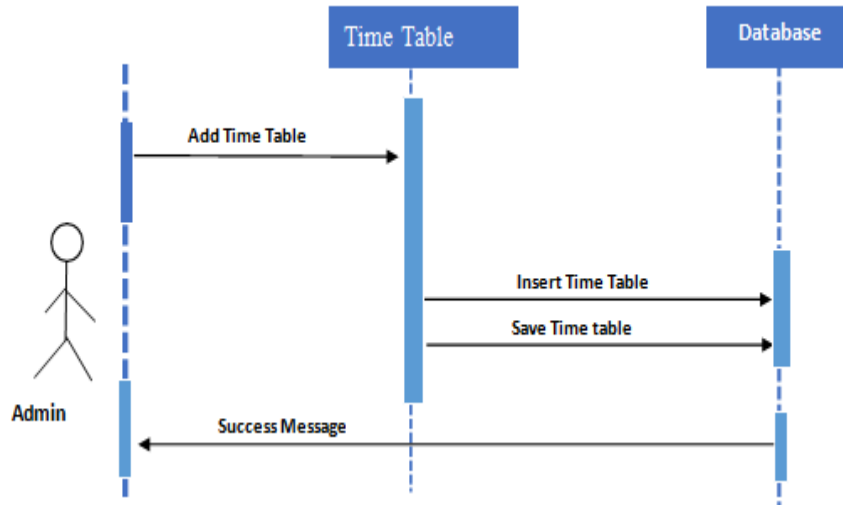


Figure 3.2.4 Time table

3.2.5 Exam results for Teacher Submit

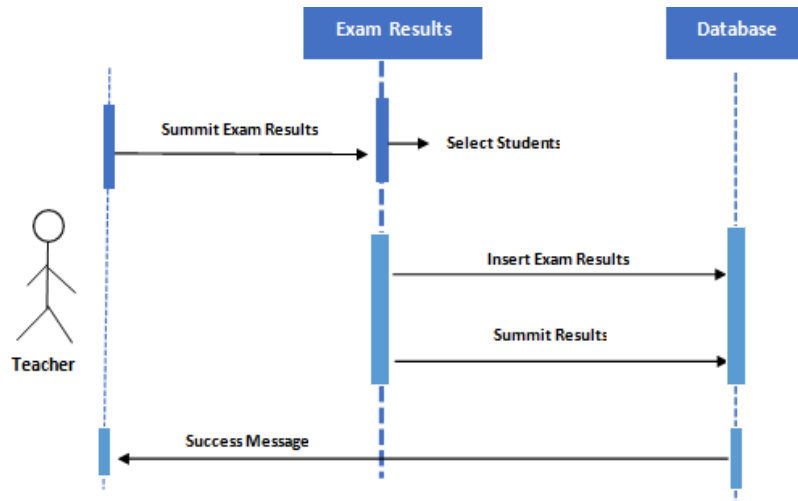


Figure 3.2.5 Exam results for teacher submit

3.3 ER Diagram

Below is a representation of the UMS Entity model using Property Relationship (ER) Diagrams. The UMS entity-relationship diagram is a graphical depiction of the system's database tables and the relationships between UMS entities, such as Students, Faculty, Courses, Results, and Attendance. Specifically, it utilized the UMS's capacity to organize data and characterize the relationships between related categories of organized data. The University Management System is supported by its students, faculty, courses, grades, and attendance records.

The attributes of the Student entity are as follows: id, name, email, phone, class, semester, faculty, department, etc, user_name, and password.

faculty entity, some of the attributes include the following: employee_id, employee_name, qualification, experience, join_date, designation, email, phone, addresses, gender, blood group, employee_image, user_name, password, role.

Course entity: course_id, course_name, course_code, faculty_id, department_id, class_id, semester_id, and teacher_id.

Student ID, semester ID, class name, subject ID, and attendance are all attributes of the Attendance Entity.

Students ID, semester, the class, topic, assignments, Cat, presentation, attendance, and final_exam are all attributes of the Result entity.

ER Diagram

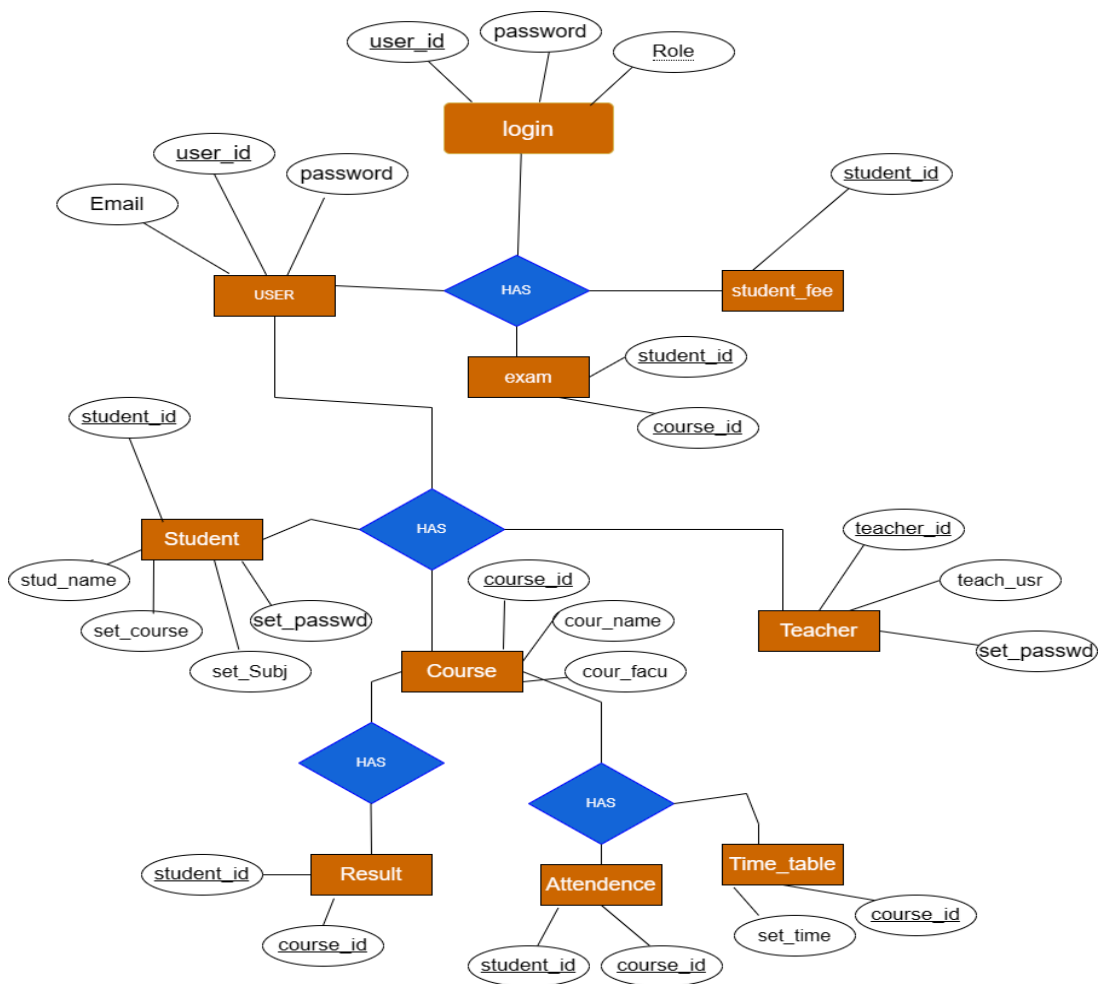


Figure 3.4 ER diagram

CHAPTER FOUR

System design specification

4.1 Tools and technology for development

Software development tools are necessary for the software development process. The use of the many tools accessible to programmers may greatly simplify the software development process. But now I'll discuss the sources of funding I'm using to launch this project.

4.2 User interface Technology

The application's interface is initially displayed to the user after application launch. Consequently, the importance of user interface is of the utmost importance. The success of a software application is dependent upon its user interface's aesthetic appeal. User interface requires using superior images, graphics, typography, style sheets, and scripting, among other elements.

4.3 Framework for CSS or Bootstrap

After markup is finished, cascading style sheets are created. It gives a broad explanation of how HTML components will look. Style sheets may be written in one of three ways. One CSS is internal, while the other is external. Inline CSS is the last one. However, external CSS is most often employed. Because all CSS data may be retained in separate files when utilizing external CSS, Additionally, Bootstrap has media queries, which include responsive layout for various devices with various screen sizes. A collection of files called Bootstrap comprises style sheets with basic definitions.

In addition, Bootstrap provides a number of JavaScript components. There are additional components included, such as JQuery UI. Using the Bootstrap framework, JavaScript and CSS can coexist on the same platform. Before developing an application interface with Bootstrap, one must have a fundamental comprehension of this framework. It will increase efficiency.

4.4 Programing language

My project i used. One is for the front side. The second is for the server side. I have used PHP, CSS, and JavaScript as the front-end language for my application. And MySQL Database as the Back-End of the system.

4.5 Implemented tools and platform

As was mentioned previously, software development requires specific instruments and technologies. It is of the utmost importance to determine which tools and platforms best complement what I need. After making the correct decision, it is necessary to implement it.

4.6 Integrated development environmental

VS code stander visual studio code enables you to use a development environment It is a commercial VS code environment for multiple platforms. It is also capable of suggesting code to programmers.

4.6.1 Web server

We took advantage of the Apache server. Usage of free and open source software is possible. It is compatible with multiple platforms. The majority of its supported features are already implemented as modules that have been compiled. This module can augment the principal capabilities and features.

4.6.2 Database SQL

SQL—pronounced "ess-que-el"—is Structured Query Language. SQL connects databases. It's ANSI's standard language for relational database management systems. SQL statements change and retrieve database data. Oracle, Sybase, Microsoft SQL Server, Access, Ingres, and others utilize SQL. Most database systems employ SQL, but some also include proprietary extensions they use just on their system. However, the conventional SQL commands "Select", "Insert", "Update", "Delete", "Create", and "Drop" may be used to perform practically anything with a database.

4.7 Database design diagram

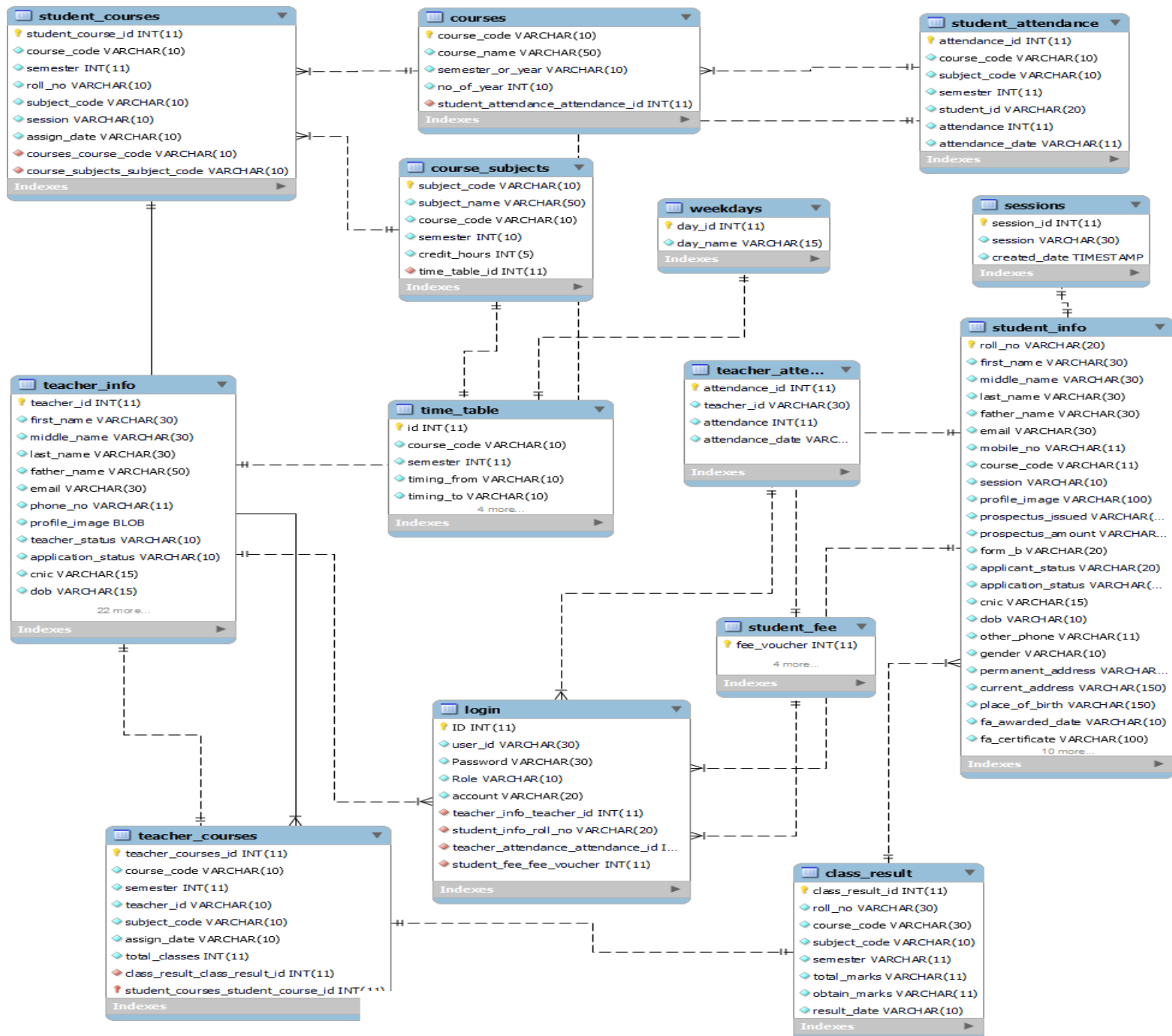


Figure 4.7 Database design

CHAPTER FIVE

Project explanation

5 Functionality Testing

Adding or modifying features in an already-completed project is often called "feature testing." In order to check the features and functionality, a new test set has to be established. Every facet and skill varies in quality. To improve the app's usability, readability, reliability, security, scalability, efficacy, and efficiency, these have been implemented.

5.1.1 Stable Features

Features	Priority	Description
Login	1	For user verification, you need to log in.
Logout	1	After logging out, your session must be terminated.
Register student and assign subject	1	Students must provide their Unite student ID and password, upon registration in order to be assigned a topic and course.
Register teacher	2	The teacher must be signed up to give them The User-name and Password
Add course	1	each course must be registered and have a unique ID.
Register subject and assign teacher	2	Subject most be register and assign one teacher
Add time table	3	Every course has to have a timetable.
Add student class results	3	Teachers and administrators may upload exam results.
Take student class attendance	3	Teachers may take class attendance
s Show student exam results	3	Each student must use the portal to see their exam

		results.
Show students attendance Status	3	Each student must use the portal to see their attendance status .
Add students fee	2	Admin will be add student fee by using each student ID
Show student fee details	3	Each student must use the portal to see their fee details .
Add teacher Attendance	2	Using each teacher's ID, the admin will take attendance of the teachers.
Show teacher attendance	3	Teacher must use the portal to see their attendances status.
Functions of Technology		
Database	1	Almost every action will use the database. So, this part needs to be closely watched because of this.

5.1.2 A Testing Plan

Determining the testing strategy is one of the process' general objectives. The testing process involves examining the object, the function methods, and the overall resource use. It also acts as a barometer for the kind of tests that need to be performed across the whole software development life cycle. Before integrating the strategies used by the quality assurance team, the application's developers should research them. After that, the test team leaders should review it. There are several testing approaches that may be utilized, depending on the kind of application system that requires testing.

5.1.3 Timetable for Tests

Test phase	Time
Develop a plan for testing	1Week
Specification for testing	2Week
Functional Evaluation	During development time
The component test	1week
Test phase	Time
Testing for integration	1week
Validation use case	1week
User interface tests	1week
a load test	1week
Testing of performance	1week
Publish for production	1week

5.1.4 Pass/Fail Criteria

The test engineers will set pass/fail criteria. By creating the pass/fail criterion, they will ascertain which input data are successfully employed and which are not. Well-worked data will be regarded as having complied with the criteria. And as failure criteria, the remaining input data will be taken into consideration.

- A system crash won't qualify as a pass case.
- Any requirement that is met 100% of the time will only be regarded as pass criteria.
- Failure criteria should also be used if data cannot be correctly shown to the application.

5.1.5 Test Environmental

Testing environment refers to the preparation of the environment with hardware and software so that test engineers can execute test cases as required. In addition to hardware and software usage, test designs may also require network configuration.

- I. Test data
- II. Database server
- III. Client's operating system
- IV. Front end running environment
- V. Browser
- VI. System and application
- VII. Network
- VIII. Report also require

5.1.6 Test case

5.1.7 Login

Test case#one		Test case name: Login			
System : university management system					
Created by: Abdullahi farah ahmed		Created Data: 23-05-2023			
registered users and students have to sign in to the application. And ahead of that, our application will confirm authentication and authorization.					
<ul style="list-style-type: none"> • Whether or not a user has been authenticated by our application when logging into the dashboard, they are always sent to the login page. • Suppose if the login information is “admin@gmail.com” and “abdla123”. 					
step	Email/user	password	Expected result	Pass/fail	comment
1	admin@admin.com	Abdla123	invalid		
2	admin@admin.com		Password can't Be blank		
3	abadmin@gmail.com	Abdla123	Successfully login		
Admin, including teachers and students, will be able to successfully log onto the application.					

5.1.8 Add teacher

Test case#two		Test case name: Add teacher			
System : University management system					
Created by: Abdullahi farah ahmed		Created date : 23-05-2023			
System Admin has the ability to create users and administer user accounts.					
<ul style="list-style-type: none"> • Admin must create the remaining users • It will provide them with a username and password • It will activate their account 					
step	Action	Response	Pass/fail	comment	
1	Data provided probably	Successfully saved			
Post-conditions: Faculty appear in all other forms after adding them.					

5.1.9 Add student

Test case three		Test case name: Add student			
System : university management system					
Created by : Abdullahi farah ahmed		Created date : 23-05-2023			
System Admin has the ability to create users and administer user accounts.					
<ul style="list-style-type: none"> • Admin must create the remaining users • It will provide them with a username and password • It will activate their account 					
step	Action	Response	Pass/fail	comment	
1	Data provided probably	Successfully saved			
Faculty appear in all other forms after adding them.					

5.1.10 Add Course

Test case six		Test name add course			
System : university management system					
Created by : Abdullahi farah ahmed		Created by date : 23-05-2023			
		Executed data:			
System Admin has the ability to add course and assign teacher for this course.					
<ul style="list-style-type: none"> • Admins have the ability to create new courses and distribute them to teachers and students. • Type the whole name of the program here. • Pick a subject for the next semester. 					
step	Action	Response	Pass/fail	comment	
1	There may be a lack of detail.	If there are any gaps in the course information, the system will ask the user to fill them in.			
2	The data is correct and comprehensive.	accepted course successfully			
Post-conditions: When reviewing attendance or test results, the instructor may see who has signed up for a class and your peers may subsequently assign you to it.					

Add subjects

Test case five		Test case name: Add subjects			
System : university management system					
Created by : Abdullahi farah ahmed		Created date : 23-05-2023			
System Admin has the ability to add course and assign teacher for this course.					
<ul style="list-style-type: none"> • Admins have the ability to create new courses and distribute them to teachers and students. • Type the whole name of the program here. • Pick a subject for the next subject. 					
step	Action	Response	Pass/fail	comment	
1	There may be a lack of detail.	If there are any gaps in the course information, the system will ask the user to fill them in.			
2	The data is correct and comprehensive.	accepted course successfully			
Post-conditions: When reviewing attendance or test results, the instructor may see who has signed up for a class and your peers may subsequently assign you to it.					

5.1.11 Student attendance

Test case six		Test case name: Take class attendance			
System : university management system					
Created by : Abdullahi farah ahmed		Created date : 23-05-2023			
System Admin and teacher has the ability to take class attendance					
<ul style="list-style-type: none"> • Registration with our application is necessary. • Each student's attendance will be noted by teachers for course credit. 					
step	Action	Response	Pass/fail	comment	
1	Students Taking the Course	Is there a class with enrolled students that would be willing to become acquainted?			
2	record on student attendance from the teacher	The teacher will keep a daily attendance record.			
Post-conditions: When a teacher takes attendance, she or he will provide each student a certain number of "attendance marks" based on the percentage of the class that was present.					

CHAPTER SIX

USE MANUAL

6 Screen shot home page

When you go to my URL, my project page will look like this:

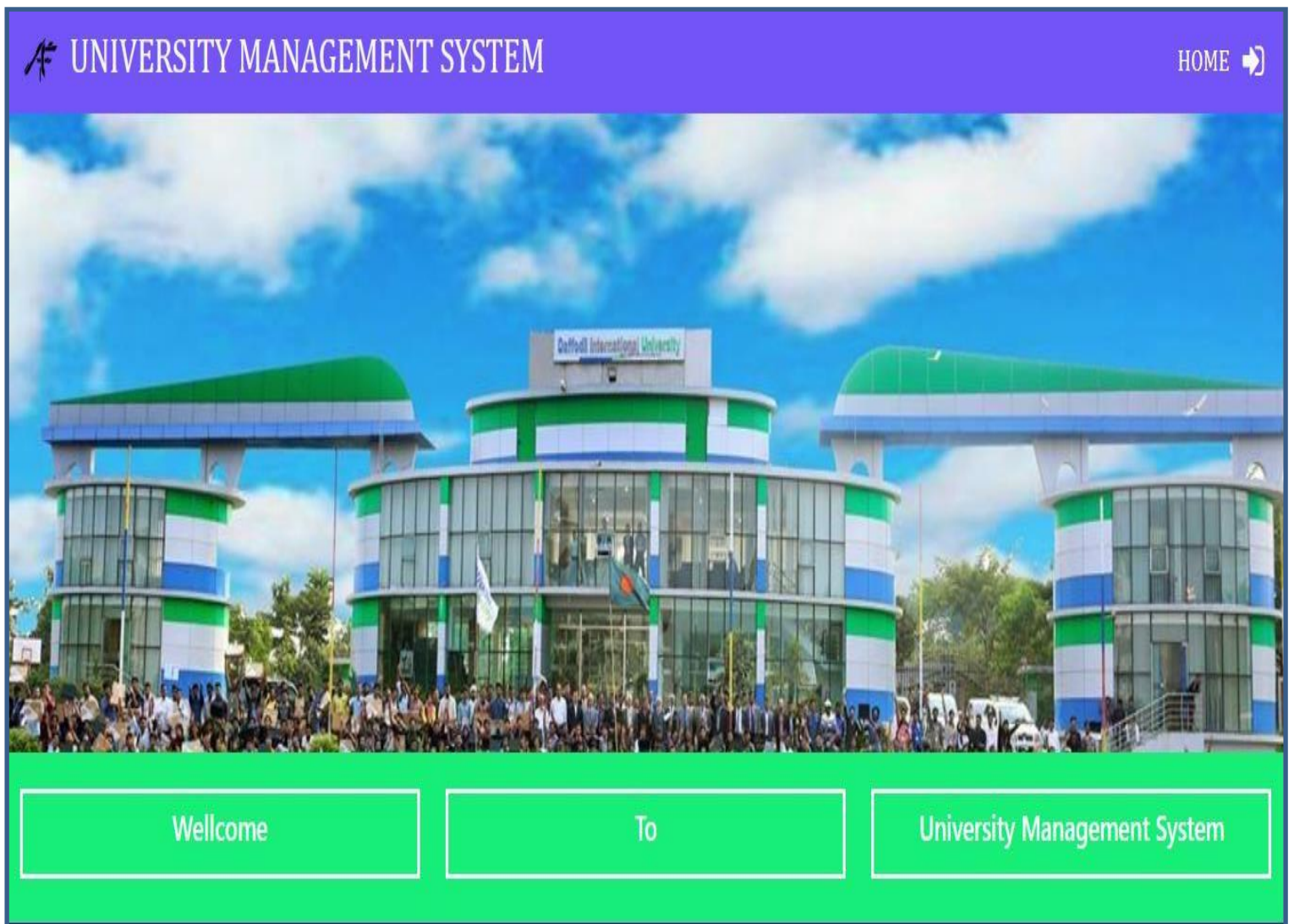


Figure 6 Home page

6.1.1 Screen Shoot login page

When you select the login button, our project's administrator will be able to create staff and students. Staff can login using their Gmail and a password provided by the administrator, and students can login using their student ID and password after registering.

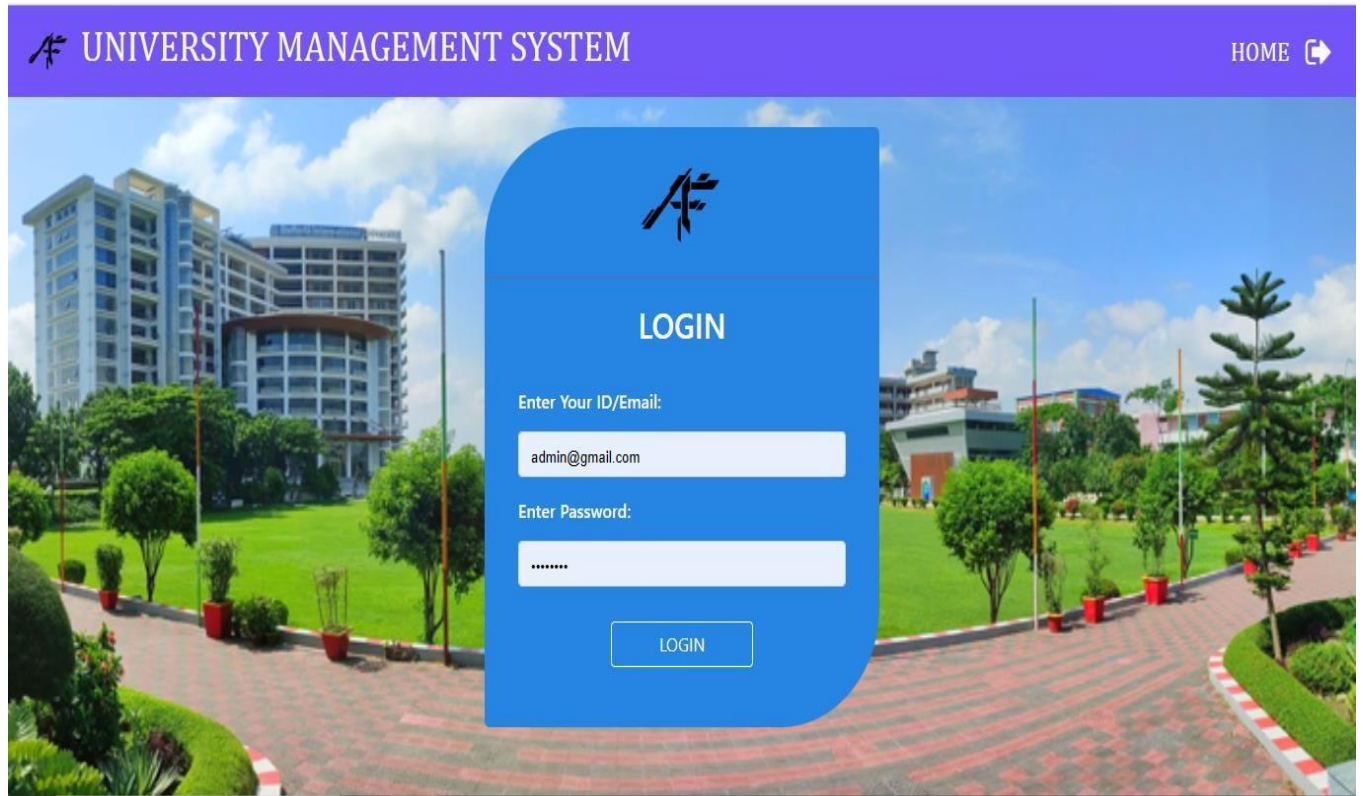


Figure 6.1.1 Teacher registration

6.1.2 Screen shoot Admin Dashboard

Admin may oversee the Entire University System.

Can add staff and students by assigning them each a unique ID; after registration, admin can do each account to activate; can add courses and assign teachers for those courses along with groups of students on those courses; can add student fees; and can upload exam results and take student attendance.

UNIVERSITY MANAGEMENT SYSTEM HOME [↗](#)

Admin Dashboard

Time Table

Class Name	Time	Day	Subject	Room No
SWE 1	13:07 15:07	Monday	BCS	5
Select 1	15:00 15:00	Saturday	223	3
Select Cou 1	22:01 01:01	Monday	SWE	3
IICT 1	15:00 18:00	Thursday	232	4
algebra 0	20:00 23:00	Sunday	alg	2
DBMS 1	01:00 02:00	Wednesday	DBMS	2

Program List

Course Code	Course Name
algebra	algebra
DBMS	Database management system
IICT	IICT
SWE	Software engineering
SWE2	programing c+
SWE3	JAVA

Department Subject Detail

Course Code	Course Title	Semester	Total Subjects	Total Credit Hours
algebra	algebra	1	1	3
DBMS	Database management system	1	1	1
IICT	IICT	1	1	3

Figure 6.1.2 Admin dashboard

6.1.3 Screen Shoot Teacher Registration

Administrators may control the system and register instructors by submitting their information. Additionally, administrators can assign subjects to teachers.

The screenshot shows the 'UNIVERSITY MANAGEMENT SYSTEM' interface. The main content area is titled 'Teacher Management System' and includes an 'Add Teacher' button. Below this is a table of teachers and an 'Assign Subjects' button.

Teacher ID	Teacher Name	Current Address	Hire Date	Email	Operations
1	farah yusuf ALI	new carmo	23-05-23	farah@gmail.com	Profile Delete
4	musa yusuf ali	new carmo	23-05-23	musa@gmail.com	Profile Delete

The 'Add New Teacher' form includes the following fields:

- First Name:
- Middle Name:
- Last Name:
- Teacher Email:
- Mobile No:
- Select Your Profile: No file chosen
- Teacher Status:
- Application Status:
- Cnic No:
- Date of Birth:
- Other Phone:
- Gender:
- Permanent Address:
- Current Address:
- Place of Birth:
- Matric/OLevel Completion Date:
- Matric/OLevel Awarded Date:
- Upload Matric/OLevel Certificate: No file chosen
- FA/Alevel Completion Date:
- FA/Alevel Awarded Date:
- Upload FA/Alevel Certificate:

Figure 6.1.3 Teacher registration

6.1.4 Screen Shoot Student Registration

In addition to managing the system and giving each student with a unique student ID, administrators may register students by submitting their information. They can also assign subjects to students.

UNIVERSITY MANAGEMENT SYSTEM
HOME

Student Management System
Add Student

Search:

Assign Subjects
Assign Single Student Subject

Roll.No	Student Name	Current Address	Session	Course ID	Admission	Profile	Operations
2021	maryam ali ahmed	new carmo	S19	Select Cour	2023-May-23		<input style="background-color: #0070c0; color: white; padding: 2px 5px; border: none;" type="button" value="Profile"/> <input style="background-color: #e91e63; color: white; padding: 2px 5px; border: none;" type="button" value="Delete"/>
2033	khalid bin ali	jdjjsnjf	S23	algebra	2023-May-23		<input style="background-color: #0070c0; color: white; padding: 2px 5px; border: none;" type="button" value="Profile"/> <input style="background-color: #e91e63; color: white; padding: 2px 5px; border: none;" type="button" value="Delete"/>
2323	muhsin mohamed ali	jdjjsnjf	S19	SWE2	2023-May-23		<input style="background-color: #0070c0; color: white; padding: 2px 5px; border: none;" type="button" value="Profile"/> <input style="background-color: #e91e63; color: white; padding: 2px 5px; border: none;" type="button" value="Delete"/>

Add New Student

<p>Applicant First Name:*</p> <input style="width: 100%;" type="text"/>	<p>Applicant Middle Name:</p> <input style="width: 100%;" type="text"/>	<p>Applicant Last Name:*</p> <input style="width: 100%;" type="text"/>
<p>Father Name:*</p> <input style="width: 100%;" type="text"/>	<p>Student Roll No:</p> <input style="width: 100%;" type="text"/>	<p>Applicant Email:*</p> <input style="width: 100%;" type="text"/>
<p>Course which you want?:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Select Course"/>	<p>Select Session:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Select Session"/>	<p>Your Profile Image:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Choose File No file chosen"/>
<p>Prospectus Issue:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Select Option"/>	<p>Prospectus Amount Recvd:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Select Option"/>	<p>Form B:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text"/>
<p>Applicant Status:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Select Option"/>	<p>Application Status:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Select Option"/>	<p>CNIC No:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="XXXXXX-XXXXXXXX-X"/>
<p>Date of Birth:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="mm/dd/yyyy"/>	<p>Mobile No:*</p> <input style="width: 100%; border: 1px solid #ccc;" type="text"/>	<p>Gender:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="Select Gender"/>
<p>Permanent Address:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text"/>	<p>Current Address:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text"/>	<p>Place of Birth:</p> <input style="width: 100%; border: 1px solid #ccc;" type="text"/>

Figure 6.1.4 student registration

6.1.5 Screen shoot for course management system

Administrators have the ability to create new courses, change existing ones, and assign teachers to specific courses and groups of students.

The screenshot shows the 'Course Management System' interface. On the left is a navigation sidebar with options: Dashboard, Teacher Registration, Student Registration, Courses, Subjects, Time Table, Class Results, Student Attendance, Teacher Attendance, Student Fee, and Manage Account. The main content area has a header 'UNIVERSITY MANAGEMENT SYSTEM' and a 'HOME' link. Below the header is a green bar labeled 'Course Management System'. The form for adding a course includes fields for Course Code, Course Name, Semester Or Years, and No of Years, with an 'Add Course' button. Below the form is a table of existing courses.

Sr.No	Course Code	Course Name	Semester/Years	Action
1	algebra	algebra	1	Delete
2	DBMS	Database management system	1	Delete
3	IICT	IICT	1	Delete
4	SWE	Software engineering	1	Delete
5	SWE2	programing c+	1	Delete
6	SWE3	JAVA	1	Delete

Figure 6.1.5 course management system

6.1.6 Screen shoot for subject management system

Administrators have the ability to introduce new subject, alter existing ones, and assign teachers to these subjects and students.

Also be able to look for students using their student-ID and see the status of their profiles.

UNIVERSITY MANAGEMENT SYSTEM
HOME

Subject Management System

[Dashboard](#)
[Teacher Registration](#)
[Student Registration](#)
[Courses](#)
[Subjects](#)
[Time Table](#)
[Class Results](#)
[Student Attendance](#)
[Teacher Attendance](#)
[Student Fee](#)
[Manage Account](#)

Subject Code:

Subject Name:

Semester:

Course Code:

Credit Hours:

[Add Subject](#)

Sr.No	Subject Code	Subject Name	Course Code	Semester	Credit Hours	Action
1	223	Programming c+	SWE2	1	3	Delete
2	232	introduction computer science	IICT	1	3	Delete
3	543	web development	SWE	1	3	Delete
4	alg	algebra	algebra	1	3	Delete
5	DBMC	Database Management System	DBMC	1	1	Delete

Figure 6.1.6 subject management system

6.1.7 Screen shoot for timetable

Using course ID and subject ID, administrators can generate schedules for each course's time and days.

The screenshot shows the 'Time Table Management System' interface. The main content area features a table titled 'Classes Time Table' with the following data:

I'd	Class Name	Timming	Day	Subject	Room No
7	SWE 1	01:07 PM 03:07 PM	Monday	BCS	5
8	Select 1	03:00 PM 03:00 PM	Saturday	223	3
9	Select Cou 1	10:01 PM 01:01 AM	Monday	SWE	3
10	IICT 1	03:00 PM 06:00 PM	Thursday	232	4
11	algebra 0	08:00 PM 11:00 PM	Sunday	alg	2
12	DBMS 1	01:00 AM 02:00 AM	Wednesday	DBMS	2

Figure 6.1.7 Time table

6.1.8 Screen shoot exam result

By selecting the course, subject, and semester, administrators and teachers can submit exam results.

The screenshot shows the 'UNIVERSITY MANAGEMENT SYSTEM' interface. The top navigation bar is purple with a 'HOME' link. The sidebar on the left is green and contains various navigation options. The main content area is white and features a 'Result Management System' header with a 'Single Student Result' button. Below the header, there are three dropdown menus for 'Select Course:', 'Select Semester:', and 'Select Subject:'. The 'Select Course:' dropdown is set to 'DBMS', 'Select Semester:' is set to '1', and 'Select Subject:' is set to 'Database Management System'. A blue 'Press' button is located below these dropdowns. A 'Submit' button is positioned above a table. The table has a purple header and contains one row of data. The 'Obtain Marks' column has a text input field with the placeholder 'Plz Enter Obtain Marks'.

Sr.No	Roll No	Course Name	Subject Name	Semester	Student Name	Total Marks	Obtain Marks
1	2033	DBMS	DBMS	1	khalid bin ali	100	Plz Enter Obtain Marks

Figure 6.1.8 exam result

6.1.9 Screen shoot student attendance

Teachers and administrators may record students' attendance by choosing the semester, course, and subject.

The screenshot shows the 'Student Attendance Management System' interface. It features a sidebar with navigation options: Dashboard, Teacher Registration, Student Registration, Courses, Subjects, Time Table, Class Results, Student Attendance (checked), Teacher Attendance (checked), Student Fee, and Manage Account. The main content area has a header 'Student Attendance Management System' and three input fields: 'Enter Class Id:' (with 'algebra' selected), 'Select Semester:' (with '1' selected), and 'Enter Subject:' (with 'alg' selected). A blue 'Press' button is located below the input fields. Below the button is a 'Submit' button and a table displaying student attendance records.

Sr.No	Roll No	Course Name	Subject Name	Semester	Student Name	Present/Absent	Percentage	Add Attendance
1	2033	algebra	alg	1	khalid bin ali	2/1	67%	Present <input type="checkbox"/> Absent <input type="checkbox"/>

Figure 6.1.9 student attendance

6.1.10 Screen shoot teacher attendance

Administrators may take teacher attendance by dialing teacher ID.

The screenshot shows the 'UNIVERSITY MANAGEMENT SYSTEM' interface. The top navigation bar is purple with a 'HOME' link. The left sidebar is teal and contains the following menu items: Dashboard, Teacher Registration, Student Registration, Courses, Subjects, Time Table, Class Results, Student Attendance, Teacher Attendance (checked), Student Fee, and Manage Account. The main content area is green and titled 'Teacher Attendance Management System'. It features a search form with the label 'Enter Teacher Id:', an input field containing 'Enter Teacher l'd', and a blue 'Search' button. Below the search form is a 'Submit' button. A table displays the attendance record for the teacher 'musa yusuf ali'.

Sr.No	Teacher ID	Teacher Name	Present	Absent	Working Days	Attendance Per	Add Attendance
1	4	musa yusuf ali	1	1	1/1	50% of 100%	Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>

Figure 6.1.10 teacher attendance

6.1.11 Screen shoot student fee

Using each student's id, the admin may add a fee for each student.

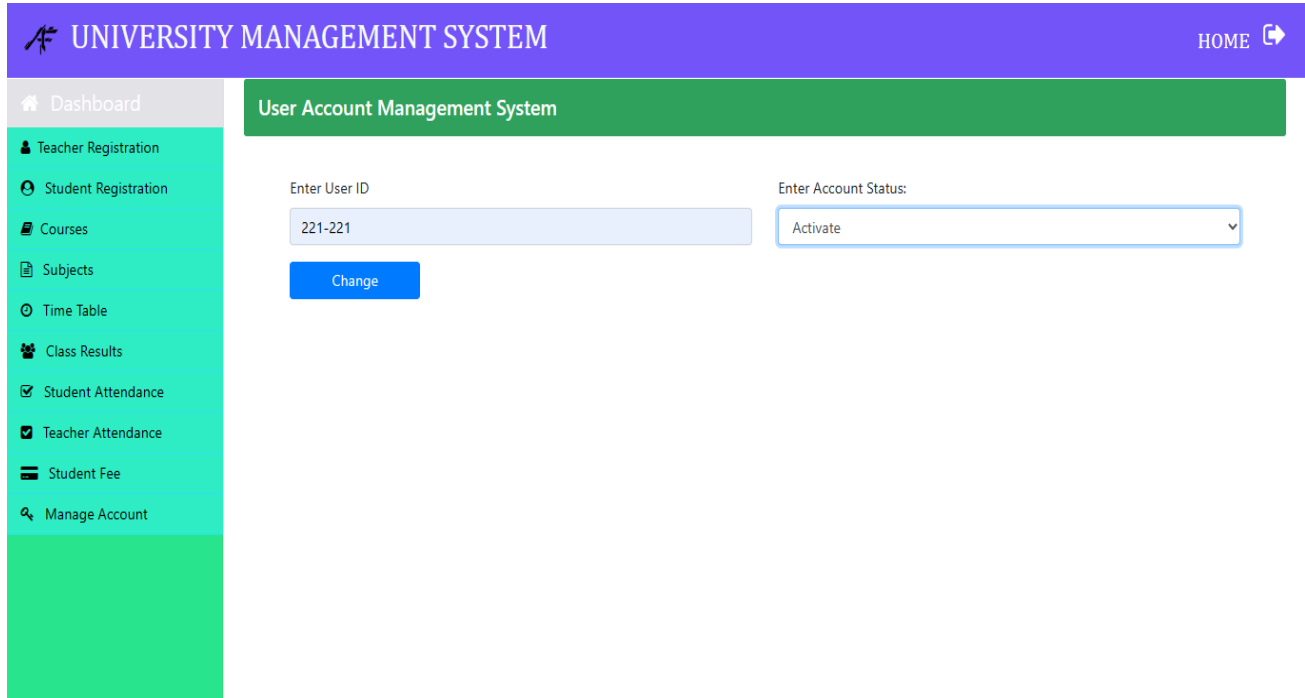
The screenshot displays the 'Student Fee Management System' interface. On the left is a sidebar with navigation links: Dashboard, Teacher Registration, Student Registration, Courses, Subjects, Time Table, Class Results, Student Attendance, Teacher Attendance, Student Fee, and Manage Account. The main content area features a green header 'Student Fee Management System', a form to 'Enter Roll No:' with the value '2033' and a 'Press' button, and a table with the following data:

Sr No.	Roll No.	Student Name	Program	Amount (USD.)
1	2033	khalid bin ali	algebra	Enter Amount for fee

Figure 6.1.11 student fee

6.1.12 Screen shoot manage account

This is the most important element of our project; without it, no account would be able to log in. Administrators may perform this action to activate or deactivate accounts.



The screenshot displays the 'UNIVERSITY MANAGEMENT SYSTEM' interface. The top navigation bar is purple with a home icon and the text 'HOME'. A sidebar on the left lists various system functions: Dashboard, Teacher Registration, Student Registration, Courses, Subjects, Time Table, Class Results, Student Attendance, Teacher Attendance, Student Fee, and Manage Account. The main content area is titled 'User Account Management System' and features two input fields: 'Enter User ID' with the value '221-221' and a 'Change' button below it, and 'Enter Account Status' with a dropdown menu currently set to 'Activate'.

Figure 6.1.12 manage account

6.1.13 Screen shoot student dashboard

Every student has access to a student portal where they may log in with their student ID and password, modify it, and see a dashboard for their current courses and percentage-based attendance statistics. Also has access to fee details and may calculate CGPA to see course results.

UNIVERSITY MANAGEMENT SYSTEM HOME

Welcome To khalid bin ali Dashboard

Subjects Detail

Subject Code	Subject Name	Semester	Credit Hours
DBMS	Database Management System	1	1
232	introduction computer science	1	3
alg	algebra	1	3

Fee Detail

Voucher No.	Roll No.	Amt (USD.)	Posting Date	Status
4	2033	300	2023-05-23 13:11:29	Paid
7	2033	50	2023-05-26 05:31:53	Paid

Current Semester Detail

Subject code	Subject Name	Semester	Marks
DBMS	Database Management System	1	100
232	introduction computer science	1	100
alg	algebra	1	100

Attendance Status

Roll No	Present	Absent	Percentage
2033	3	2	60%

Figure 6.1.13 student dashboard

6.1.14 Screen shoot student results

Student may calculate as CGPA to view results quickly and get marks and grade.

The screenshot shows a web interface for a University Management System. The top navigation bar is purple with the university logo and the text 'UNIVERSITY MANAGEMENT SYSTEM' on the left, and a 'HOME' link with a right-pointing arrow on the right. Below this is a sidebar navigation menu with a light blue background, containing links for 'Dashboard', 'Personal Profile', 'Personal Information', 'Student Results', 'Student Transcript', 'Student Fee', and 'Change Password'. The main content area has a green header for 'Student Result Summary' and a table displaying student results.

Term	Course	Subject	Cr.Hr	Total Marks	Obtain Marks	Grade	CGPA
algebra-1	algebra	alg	3	100	85	A	4
DBMS-1	DBMS	DBMS	1	100	65	C	2.7
IICT-1	IICT	232	3	100	90	A+	4
1.	FINAL RESULT	3	7	300	240	B+	3.81

Figure 6.1.14 student results

6.1.15 Screen shoot student profile

Student may view his profile also student are able to change his password

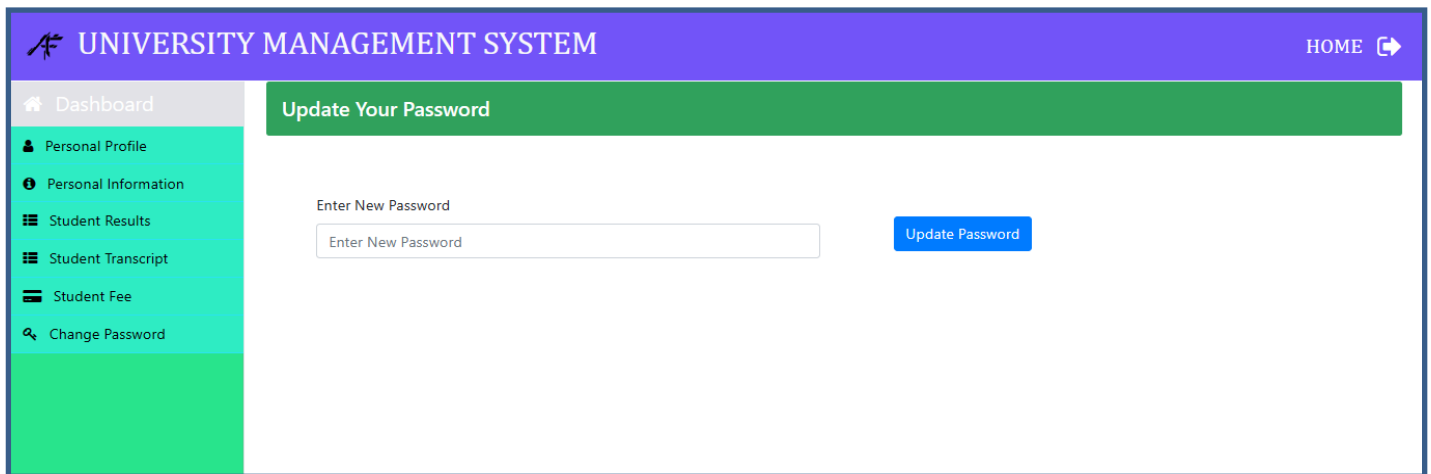


Figure 6.1.16 student profile

6.1.16 Screen shoot teacher dashboard

The teacher may see their attendance reports and status reports. A teacher is able to upload results, take attendance, and see the current semester's courses and teaching methods.

UNIVERSITY MANAGEMENT SYSTEM HOME ↗

Dashboard

Welcome To musa yusuf ali Dashboard

Notifications +

- Notification for teacher
- Notification for teacher
- Notification for teacher
- Notification for teacher
- Notification for teacher

Attendance Report

Month	Working Days	Presents	Absents	L.A	C.L	M.L	S.L
5	1	1	0	00	15	15	15

Figure 6.1.16 teacher dashboard

6.1.17 Scree shoot result submit

By calling the class ID and semester, the teacher may upload the results and check how many students are enrolled in the course. He is able to publish the grades.

UNIVERSITY MANAGEMENT SYSTEM
HOME [↗](#)

Dashboard

Add Class Result

Enter Class Id:

Enter Semester:

Enter Subject:

Sr.No	Roll No	Course Name	Subject Name	Semester	Student Name	Total Marks	Obtain Marks
1	2033	algebra	alg	1	khalid bin ali	100	<input style="width: 80px;" type="text" value="80"/>

Figure 6.1.17 result submit

6.1.18 Screen shoot teacher taking attendance

By entering the class ID and semester, the teacher may take attendance and determine how many students are really enrolled in the course.

UNIVERSITY MANAGEMENT SYSTEM [HOME](#)

Student Attendance

Enter Class Id: algebra Enter Semester: 1 Enter Subject: alg

[Press Enter](#)

[Submit](#)

Sr.No	Roll No	Course Name	Subject Name	Semester	Student Name	Present/Absent	Percentage	Add Attendance
1	2033	algebra	alg	1	khalid bin ali	3/2	60%	Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>

Figure 6.1.18 teacher taking attendance

6.1.19 Screen shoot teacher profile

Teacher may view his profile also student are able to change his password

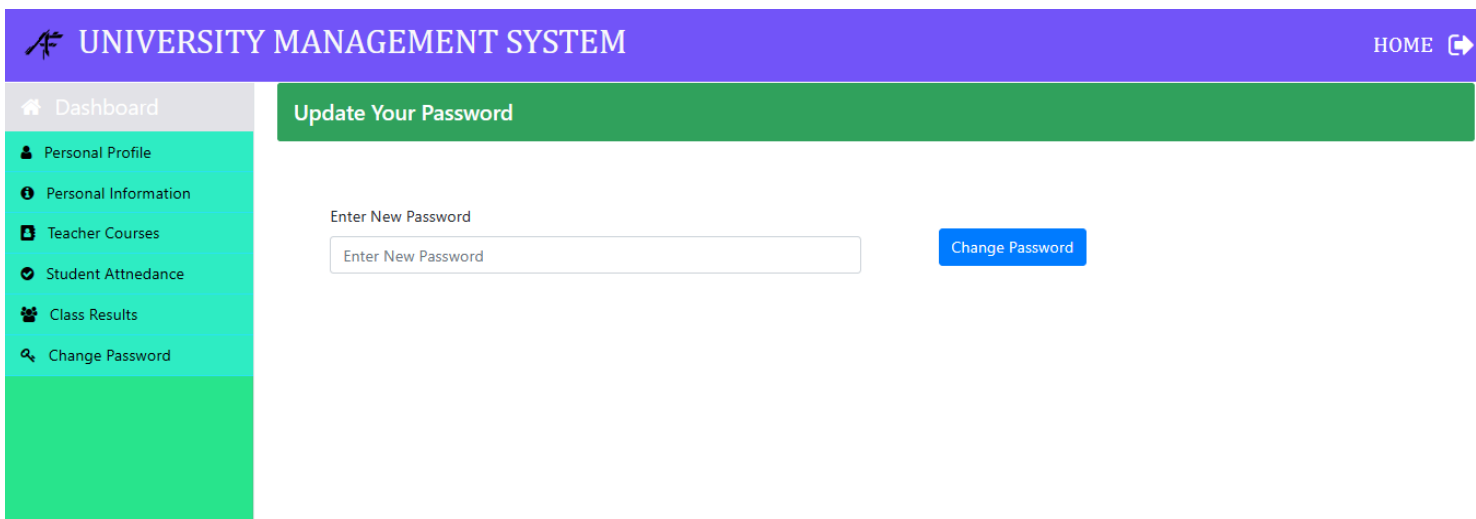


Figure 6.1.19 teacher profile

CHAPTER SAVEN

CONCLUTION

7 Github link

<https://github.com/salmanfarah/UNIVERSITYMS>

7.1.1 Project Overview

In March, I finally got around to starting to work on the project. From the start of this project, a lot of time, work, and commitment will be needed to make sure that all stakeholders' needs are met. Then I presented the proposed idea. I went to work, then.

Every application needs a database. I spent time creating a database diagram with correctly connected tables. I then configured the user interface. My app's interface is simple. After finishing, I developed the project's main features.

After a development project is over, work continues. More important tasks must be done. This is an actual test. This technique is called quality control. Most software development organizations have a quality assurance division. A security researcher's main task is to find software vulnerabilities. If even one issue remains after stakeholder handoff, the project could fail. It's important to have a testing plan. Now that I've done developing the project, I can safely confirm to its excellent grade.

7.1.2 Limitation

Similar to how nothing in the world is completely perfect, my application has certain limitations. But I had to make an effort to finish this application.

Below are limitations.

- A. Online exam:** Our application does not include an online exam that students may take during their student portal session.
- B. Teaching Evolution:** our application does not enable students to evaluate teachers or admin to see survey results.
- C. Certificate & transcript apply:** The ability to apply as a student directly on the student portal is not included in our application.

7.1.3 Achievements and Challenges

A project, in my view, is not tough if there are no obstacles in the way of its progress. Because we understand that challenges provide us an opportunity to demonstrate our character. Success is similar to taking a trip that is lined with challenges, tests, and achievements.

I didn't know how the software development life cycle operated before this project. This project improved my capacity to prepare for client requirements. Since then, I've spent time on system analysis and database design. My supervisor has been a huge help for this project.

All testing was complete and passed user standards. The mentioned tests are suitable for testing. System development requires testing, which should be handled carefully.

7.1.4 Future scope

I have gained a wealth of knowledge from working on this project at every stage. to monitor the development of this task. My supervisor efforts to promote my system's growth by fostering positive communication and the sharing of ideas have been much appreciated. This knowledge will be invaluable to me on other projects of a similar type.

7.1.5 Reference

1. Diagram art
<https://www.draw.io/>
2. Here i gained some knowledge from some platforms
<https://www.youtube.com>
<https://www.google.com>
<https://www.wikipedia.com>
<https://www.php.net>
<https://www.mysql.com>
<https://www.w3schools.com>
<https://www.jquery.com>
<https://www.stackoverflow.com>
3. Database design diagram
<https://www.mysql.com/productsworkbench>

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