ONLINE E-LEARNING PLATFORM

Thesis submitted to the Institute of Information Technology, Quaid-i-Azam University, Islamabad, for the partial fulfillment of the degree of

Master of Science

In

Information Technology

By
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INSTITUTE OF INFORMATION TECHNOLOGY

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In the Name of Allah, The Beneficent, The Merciful

"(96:1) Recite in the name of your Lord Who created,

(96:2) created man from a clot of congealed blood. (96:3) Recite: and your Lord is Most generous, (96:4) Who taught by the pen, (96:5) taught man what he did not know."

Surah 96 Al-'Alaq,Ayat1-5

STATEMENT OF SUBMISSION

This is to certify that **"Zain Ul Abedin"** Registration Number. "**01161911013**" has successfully completed the final project as **"Online E-Learning Platform"** Quaid-I-Azam University, Islamabad to fulfill the partial requirement of the degree **"Master of Science in Information Technology".**

Project Supervisor

Mam. Robina Rashid

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External Examiner

Mam.

———————————————

*<u>**Dedicated to**</u>*

My beloved Parents & respected Teachers

In their aspirations, were our aspirations.

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيْمِ

ACKNOWLEDGMENT

In the name of Allah, The Most Beneficent and The Most Merciful. All praises are to Allah for all blesses so that we can accomplish this thesis. In addition, may peace and salutation be given to the Prophet Muhammad (SAW) who has taken all human being from the darkness to the lightness. Alhamdulillahirobbilalamin praise and gratitude only to Allah, the Glorious, the Lord, and the All mighty, the Merciful and the Compassionate, who has given bless and opportunity to finish the paper entitled The Social house. Greetings and invocation are presented to the Prophet Muhammad (SAW), who has guided mankind to the right path blessed by the Lord.

This thesis is presented to the Department of the Information Technology as a partial fulfillment for the Degree of MSc-IT from Quaid-i-Azam University Islamabad

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Preface

Chapter 1: Includes the introduction to the project, problem definition existing system, motivation, and problem solution, scope of the system, project objectives and constraints.

Chapter 2: Includes requirement analysis, functional and nonfunctional requirement. It also includes system requirements of the project.

Chapter 3: Includes a system design, use cases of project & use case diagram, activity diagram and Entity Relation diagram.

Chapter 4: Includes tools and technology used in this website.

Chapter 5: Includes interface of the whole website.

Chapter 6: Includes system testing of every function.

Chapter 7: Includes Conclusion and Future work.

ABSTRACT

For our final year project, I am aimed to create a "Online E-Learning Platform" for our student and faculty to interact with each other in a secure and exclusive environment alike to Prevent gatherings and making it digital, keeping the spirit of innovation and information technology alive, I am aimed to create this university through online system.

In this regard I aim to design a zone and aura that interact with technology and creativity to deliver excellent online interaction for every student, teacher, and personnel with initiatives like a personalized profile.
The main aim is explaining our initiative with all its details and relevant information to be studied and reviewed.

Table of Contents

Chapter 1
Introduction

1.1 Introduction

The core purpose of my project is to introduce a such a site for students of our institution. This site is basically designed for learning purpose that will be greatly beneficial for the student and faculty. This kind of E-learning site provide a good platform for the students to handle their class learning easily.

The major problem faced by our student and faculty is the unavailability of such type of websites that to learning at home. So, this website will cover all these major and minor issues clearly. It will help them to learn from class or anywhere.

1.2 Problem Definition

The Since situation of COVID-19 many students lost our study. Difficulty of analyzing to learn, The COVID-19 has resulted in schools shut across the world. Globally, over 1.2 billion children are out of the classroom.

As a result, education has changed dramatically, with the distinctive rise of E-learning, whereby teaching is undertaken remotely and on digital platforms.

Research suggests that online learning has been shown to increase retention of information, and take less time, meaning the changes coronavirus have caused might be here to stay. While countries are at different points in their COVID-19 infection rates, worldwide there are currently more than 1.2 billion children in 186 countries affected by school closures due to the pandemic.

1.3 Motivation

This system will be able to handle many services to take care of all students learning in a quick manner. This system will save time and paperwork and make learning more systematic and disciplined. ... In this system students take to the learning video, books and notes will be place in one platform.

1.4 Problem Solution

To find the solution of defined problems in the above section I am going to make solutions for these problems, which is a website for admitted students in university. One main purpose of this project is to bring up confidence among the students so they can seek guidance. This site will be a source to overcome all such issues generally faced at every step.

1.5 Goals and Objectives

- Corporate between the data stored in the server of the Institution and our On-line E-learning system. To deal with On-line System in an easy way.
- Create strong and secrete database that allow for any connection in a secret way, to prevent any outside or inside attacks.
- The major goals of E-learning enhance the quality of learning and teaching meet the learning style or needs of student.
- Improve user user-accessibility and time flexibility to engage learners in the learning process.

1.6 Scope

- On-line E-learning system is designed for Educational Institutes (like schools, universities, training centers).

- The system handles all the operations like add users into the system, upload video lecture, upload books, upload helping notes regard any help in their project.

- All students to see or display video books and notes.

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1.7 Constraints

Constraints are the terms and conditions to the system that must be kept in mind when using the system. In this project, there are also some constraints that must be addressed before using this project.

- Add user into the system.
- Upload video lecture.
- Upload books.
- Data saved on the server.
- Upload helping notes.
  .

1.8 Summary

The main reason of introducing this website is to allow the students to register easily without facing any of hurdles. The site will help all students and teachers to solve issue of student. It will give a better way to learning at home. understanding to resolve the issues like final year project issue will be resolved.

Every student will get his/her Personal ID number to log in to the account where every solution will be discussing.

Chapter 2
System Requirement
& Analysis

2.1 Introduction

Requirements and analysis of the requirements for this website are discussed in this chapter. The main purpose of requirement gathering, and specification is to specify the requirements of the system.
The scope and limitation of this system is:

- The on-line learning system design to educational institutes.

- Hold all operation student, teachers, and administrator.

- Support multiple choices books videos and notes.

- Allow the student to leaning subject related books and videos.

- Verify a security, authority, and safety.

2.2 User Requirements

The user requirement for this system is to make the system fast, flexible, less prone to error, reduce expenses and save the time.

- Time can be saved when using this website,
- A system can give a platform to the student to continue your study while the situation of corona virus.
- When any error occur of the project student will be discuss in chat box.

2.2.1 Functional Requirements

Functional requirements are those functionalities that software/project should perform. Functional requirements specify the work of system that it performs. These requirements are necessary to run a system smoothly and make them functional.
This section gives a functional requirement that applicable to the online E-learning system. There are three sub modules in this phase.

- User registration module
- User login module
- Admin login module
- Upload video module
- Upload book module
- Upload notes module

MODULES FUNCTIONALITY

User registration module: first, the user will register yourself.
User login module: And then login to the software.
Admin login module: Admin login when accept request of user, upload video, upload books and upload notes.
Upload videos module: The database is prepared & loaded into the software then user see the subject related videos which admin are upload.
Upload books module: All the subject related books will be upload on website and user read the book easily and download the book on the website.
Upload notes module: Important topic related notes will be upload.

User registration Features
User registration: First, the user will register yourself.
User registration: Enter your first name, last name, gender, father name, mother name, course registration no., semester, date of birth, address, city, pin code, mobile no., E-mail id, choose profile photo, enter username, password and confirm password.
User registration: Click registration button to register yourself.
User registration: Any mistake to putting information is incorrect to click clear button.

User login Features
User login: First user enters username and password.
User login: Username and password are valid than login.
User login: Can edit profile and then update the profile.
User login: Can see video notes and books which upload admin.
User login: And then user logout.

Admin login Features
Admin login: First admin enters username and password.

Admin login: Username and password are valid than login.

Admin login: Accept the request of user or delete.

 Admin login: upload video, books, notes and delete them.

Admin login: And then admin logout.

Upload videos Features

Upload videos: user can view his available videos.

Upload videos: user cannot delete and upload video.
Upload videos: video is available of different subject vise.
Upload videos: only admin can upload the videos.
Upload videos: only admin can delete the videos.

Upload books Features:
Upload books: user can view his available books.
Upload books: user cannot delete and upload books.
Upload books: book is available of different authors.
Upload books: only admin can upload the books.

Upload notes Features:
Upload notes: user can view his available notes.
Upload notes: user cannot delete and upload notes.
Upload notes: notes are available of different topics.
Upload notes: only admin can upload the notes.

2.2.2 Nonfunctional Requirements

Performance Requirements

Some Performance requirements identified is listed below:
The database shall be able to accommodate a minimum of 10,000 records of students.

The software shall support use of multiple users at a time.

Safety Requirements
The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

Software Quality Attributes
The Quality of the System is maintained in such a way so that it can be very user friendly to all the users.
The software quality attributes are assumed as under:

- Accurate and hence reliable.

- Secured.

- Fast speed.

- Compatibility.

System Interfaces:
This section describes how the software interfaces with other software products or users for input or output.

User Interface
Application will be accessed through a Browser Interface. The interface would be viewed best using 1024 x 768 and 800 x 600 pixels resolution setting. The software would

be fully compatible with Microsoft Internet Explorer for version 6 and above. No user would be able to access any part of the application without logging on to the system.

Hardware Interfaces

- **Server Side:**
- Operating System: Windows 9X/XP, Windows ME
- Processor: Pentium 3.0 GHz or higher
- RAM: 256 Mb or more
- Hard Drive: 10 GB or more
- **Client side:**
- Operating System: Windows 9x or above, MAC or UNIX.
- Processor: Pentium III or 2.0 GHz or higher.
- RAM: 256 Mb or more

Software Interfaces

- **Client Side:** .HTML, Web Browser, Windows XP/2000/Vista

- **Web Server:** .HTML, Windows XP/2000/Vista

Communications Interfaces

The Customer must connect to the Internet to access the Website:
- Dialup Modem of 52 kbps
- Broadband Internet
- Dialup or Broadband Connection with an Internet Provider.

System Evolution:

- **Including image support:**

Allow to adding students, faculty members and administrator images to the system. Which available for student to ensure that learn for his teacher. Also, the teacher can see his student's image.

- **Flags:**

Allow the student to put a symbol near the question that helps the student to return and review the questions and change them accordingly.

- **Enable and disable learning:**

Allow the faculty member to control for enable or disable the learning for his students.

Enhanced the questions to be appear as random for each student:

- Make the order of questions as random or select random questions from a set of questions.

2.3 Appendices:

Definition of online E-learning system:

2.3.1 Introduction:

A learning system based on formalized teaching but with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet.

2.3.2 Purpose:

There are several types of E-learning that depend on the amount of physical interaction. Entirely online E-learning occurs without any face-to face interaction. Course work and materials are distributed electronically through email, websites.

2.3.3 Features:

- User login to register.
- Amin login to upload data.
- Admin upload video and user see the subject related videos.
- Admin upload the books and user read the books.
- Admin upload the notes and user read the notes.

2.3.4 Advantages:

- Today, most of the institute and university are online learning system to be a part of this fastest growing world.
- Online E-learning System covers almost all type of problems faced by an institute and university while learning related issue.
- User can get education of any place where internet facility is available.
- Get learning without traveling cost.
- Self-place learning and easily to learn.

Chapter 3
System Design

3.1 Introduction

To understand any system in a better way we need the help of different diagrams of the system. With these diagrams, we can understand the system more quickly than reading all the documents about the system. In this chapter, some of these diagrams are designed which includes use-case diagram, Activity Diagram, Entity relation diagram (ERD), Class diagram.

3.2 Use-case Diagram

In software and systems engineering, a use case is a list of actions or event steps typically defining the interactions between a role (known in the Modeling Language as an actor) and a system to achieve a goal. The actor can be a human or other external system. Use case analysis is an important and valuable requirement analysis technique that has been widely used in modern software engineering.
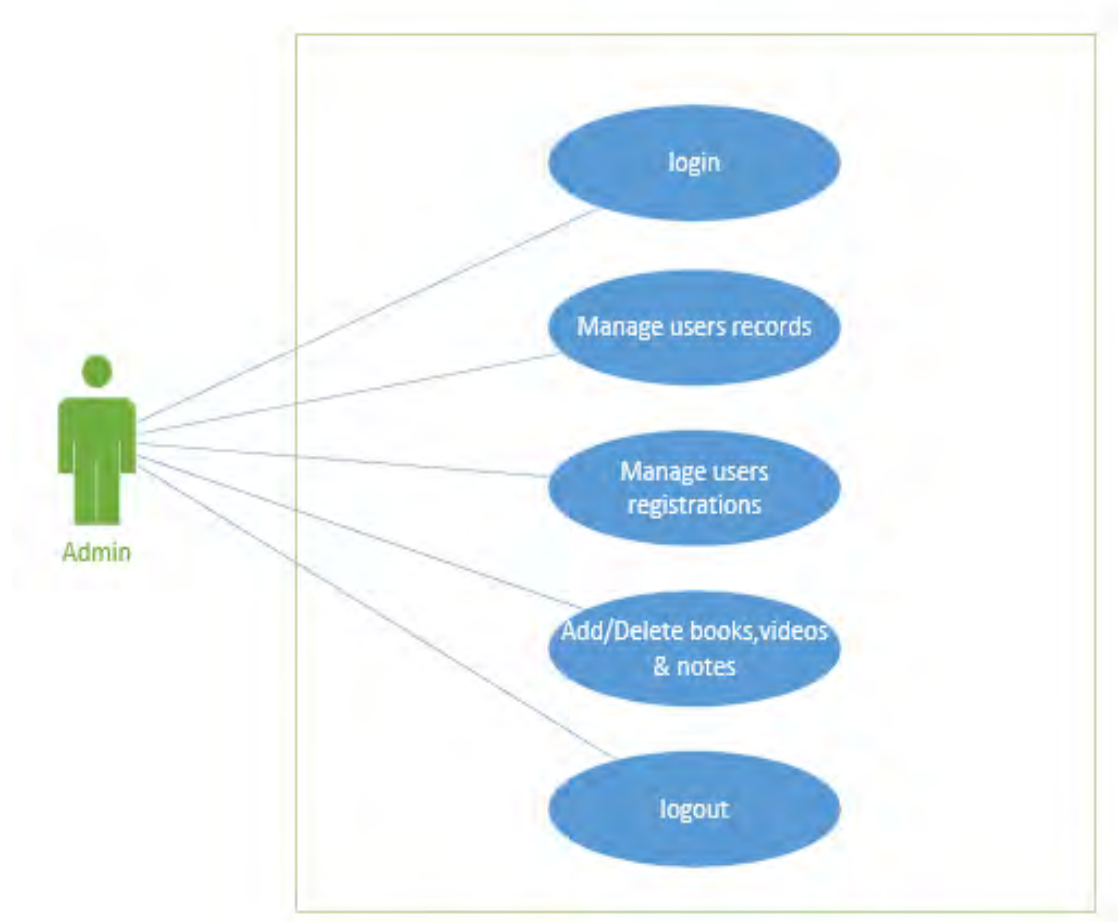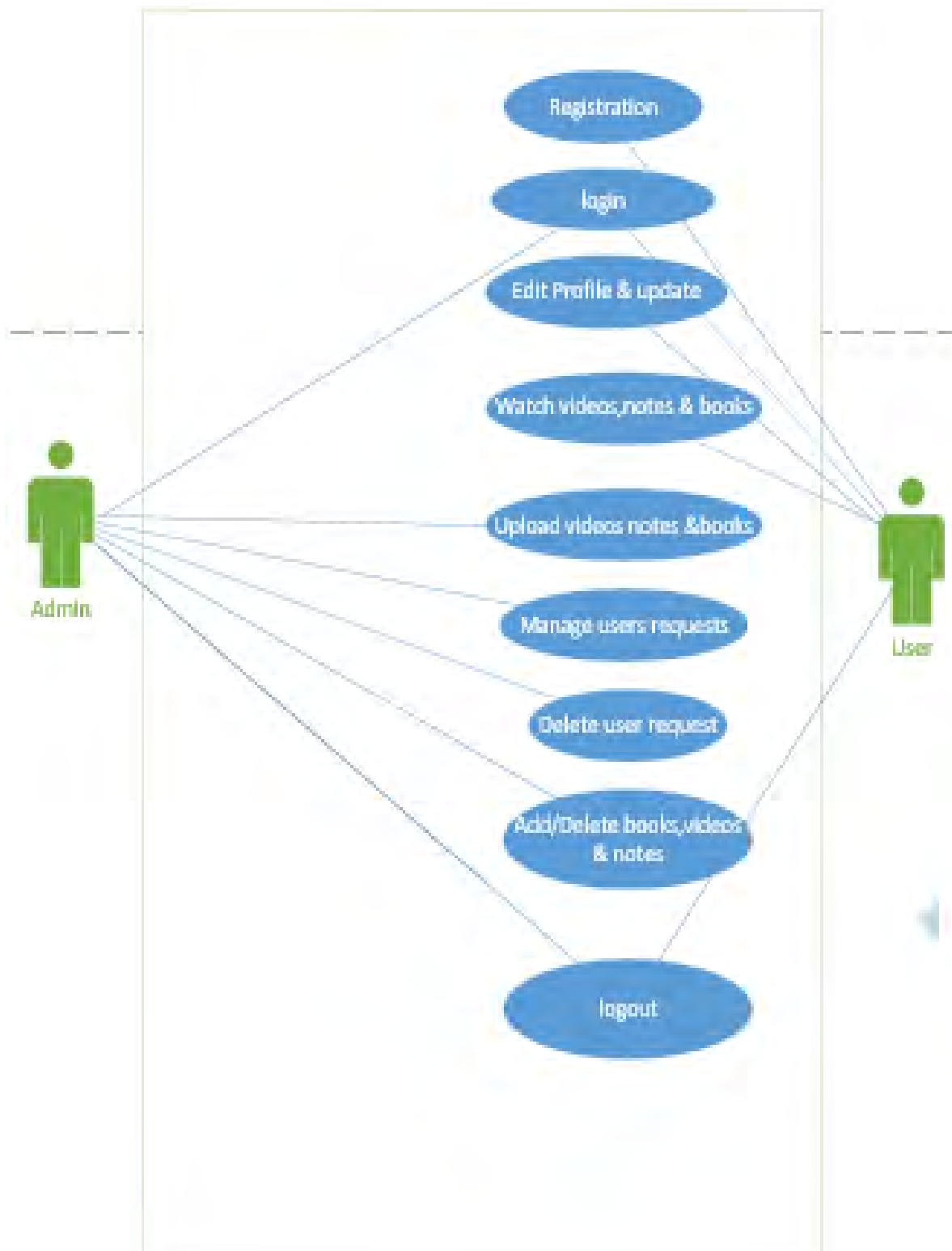

Figure 3.1: Use Case diagram for admin

Figure 3.2: Use Case Diagram for Admin and User

Table 3.1: Use case of user registration

ID	Use Case 1
Primary Actors	User.
Pre-Condition	Device is connected through Internet.
Post-Conditions	Registration successfully. Details send to Admin.
Main success Scenario	Message delivered that registration successfully.
Alternative flows or Extensions	Actor left some mandatory data fields empty (Full name, Registration number, Department, Semester, Password, email). System shows error message that please fill up the mandatory data fields.

Table 3.2: Use Case of login

ID	Use Case 2
Primary Actors	User/Admin
Input	Login id and Password.
Pre-Conditions	Actor is registered and information is saved in the database.
Post-Conditions	Logged in successfully and home screen is visible.
Main success Scenario	System display log in screen having two input fields for Login id and Password. • User Enter Login id and Password. • User clicks on Submit button. • System Validate Login id and Password. • Logged in successfully and Home screen is displayed.
Alternative flows or extensions	• Incorrect Password. • Login id is valid, but information not stored in database. • System shows error message that invalid Password.

Table 3.3: Use Case of upload/delete posts/status.

ID	Use Case 3
Primary Actors	User.
Input	None
Pre-Condition	Actor can log in the system.

Post-Condition	Actor cannot upload/delete posts/status
Main success Scenario	User cannot upload or delete video notes and books only our profile will be edit and update.
Alternative flows or extensions	Actor logged in but Upload post/status portion unable to see.

Table 3.4: Use Case of update posts

ID	Use Case 4
Primary Actors	Admin
Input	None
Pre-Condition	Actor can log in the system.
Post-Condition	Actor can upload posts
Main success Scenario	Only admin can update post.
Alternative flows or extensions	Actor logged in but Upload post/status portion unable to see.

Table 3.5: Use Case of View

ID	USE CASE 5
Primary Actor	User
Pre-Condition	User logged in the system
Post-Condition	Get access to view the post

Main success Scenario	Actor can view the posts
Alternative Flows or extension	Actor logged in to the system but unable to view/download post and comment on post.

Table 3.6: Use Case Update Profile

ID	Use Case 6
Primary Actors	User.
Input	Click the button of Update profile
Pre-Condition	1-Logged in the system 2-Enable the internet connection.
Post-Condition	Update Profile form open successfully.

Main success Scenario	Click on the update profile button.
	• Enter details.
	• provide profile picture.
	•Click on the submit button.
Alternative flows or extensions	Actor(user) clicking tab but
	•update Profile section not open.

Table 3.7: Use Case of Add /delete video books &notes.

ID	Use Case 7
Primary Actors	Admin.
Pre-Condition	• Logged in the system.
	• Enable the internet connection.
	• Active on the Home screen.
Post-Condition	1-Able to Register any course using course code and course name.
	2-Add any course.
	3-Delete any course.
Main Success Scenario	Admin upload the course like books video and topics vise notes.
Alternative flows or extensions	• Unable to add/delete course.

Table 3.8: Use Case of Manage User Registration

ID	Use Case 8
Primary Actors	Admin
Input	User records include
	Full Name
	Semester
	Reg NO.
	Course
	Reg date
	Profile
Pre-Condition	• Actor (Admin)
	• Logged in the system.
	• Enable the internet connection.
	• Active on the Home screen.
Post-Condition	Accept request and delete user Record
Main success	System displays the input fields for option" Manage Users Record" and
Scenario	Actor (Admin) can
	• View the Record of all the users.
	• Able to delete the record of users.
	• Able to add the users.
Alternative flows	Actor (Admin) delete the record but not change status on database

Table 3.9: Use Case of Delete student Record.

ID	Use Case 9
Primary Actors	Admin
Input	None
Pre-Condition	• Logged in the system. • Enable the internet connection. • Active on the Home screen.
Post-Condition	1-Able to check the user records. 2- Delete any user.
Alternative flows or extensions	• Unable to view or delete user record

Table 3.10: Use Case of logout

ID	Use Case 10
Primary Actors	Admin/user
Input	None
Pre-Condition	User must have login to system
Post-Condition	When user click on logout button then destroy the session and user logout from their account
Alternative flows or extensions	Actor click on logout button but unable to logout from account

3.3 Activity Diagram

Activity diagram is another significant diagram in UML to define the vibrant features of the system. Activity diagram is mainly a flowchart to symbolize the flow from one activity to another activity. Activity by itself can be termed as an operation of the system. The control flow is drawn from one operation to another. This flow can be progressive, diverged, or parallel. Activity diagrams deal with all type of flow control by using diverse elements such as fork, join, etc.
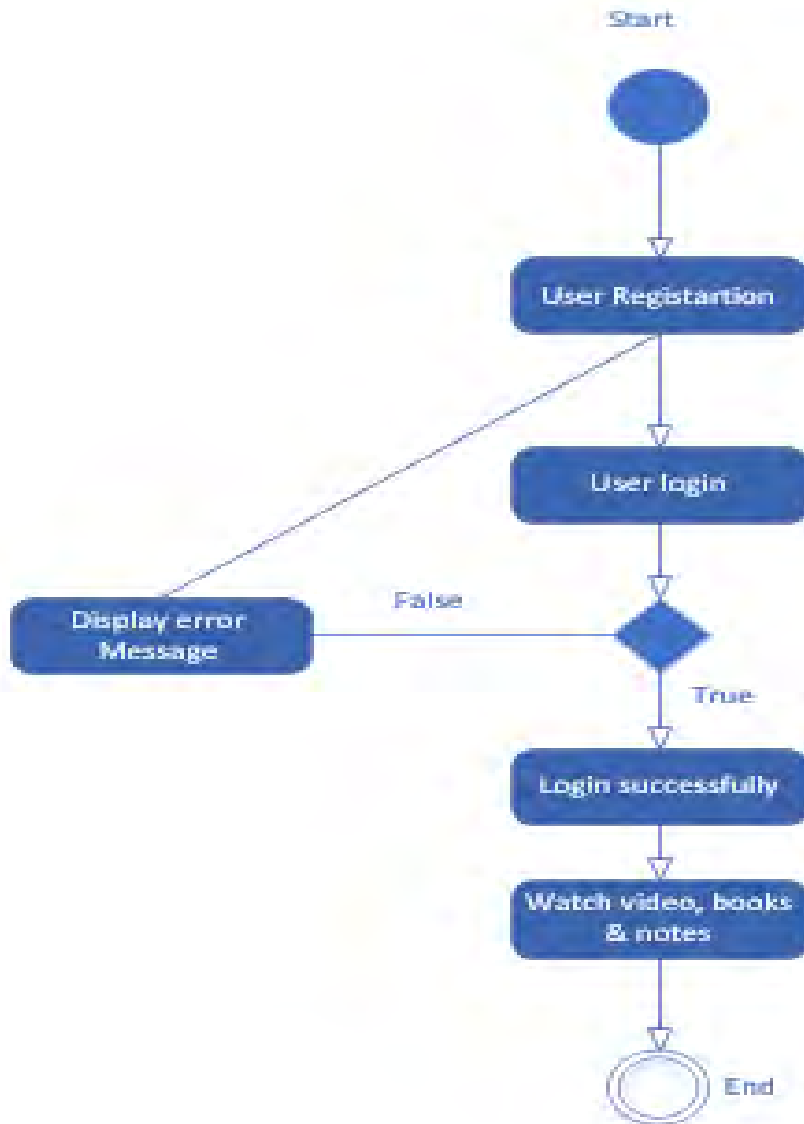

Figure 3.3: Activity diagram for user login
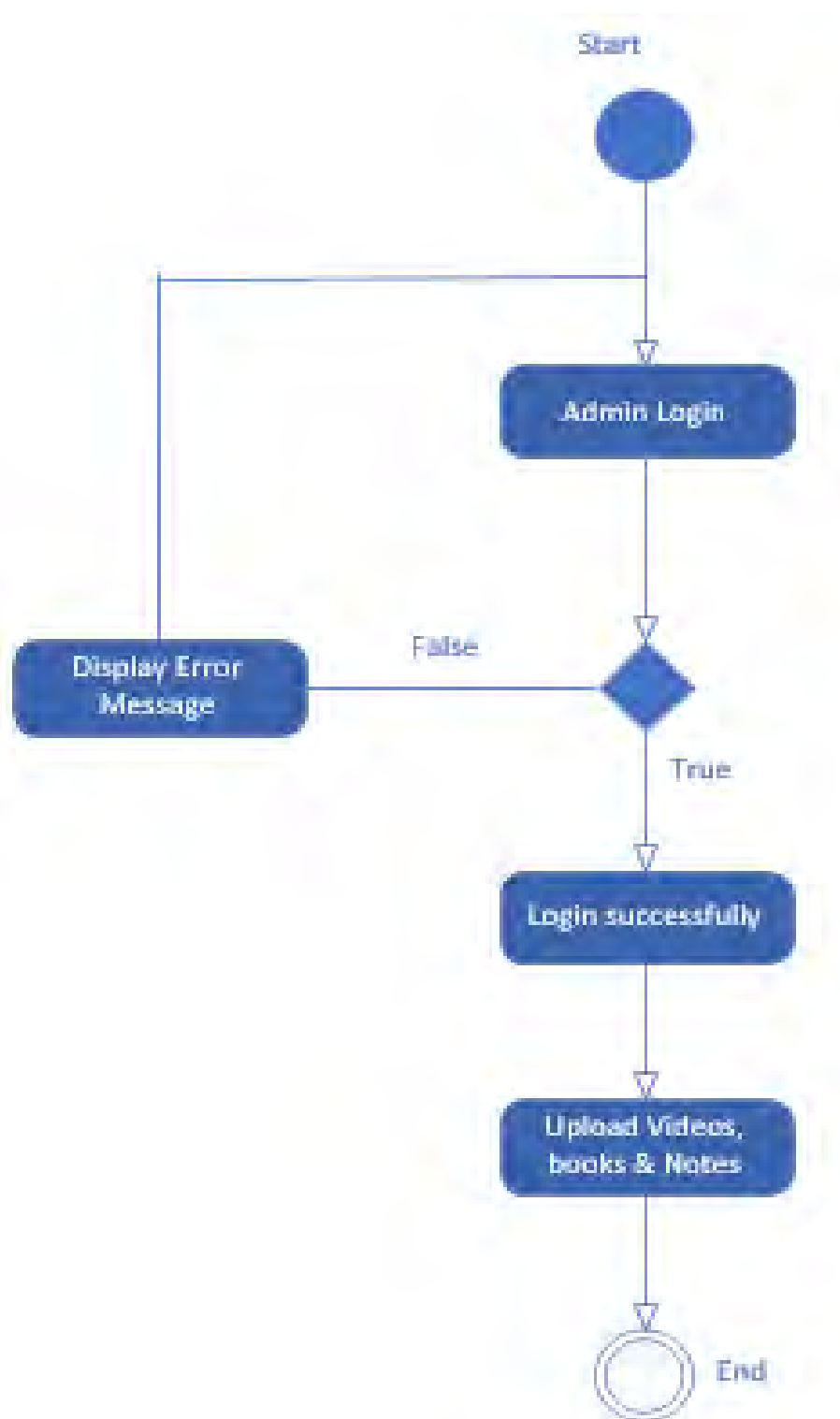
Figure 3.4: Activity diagram for Admin Login
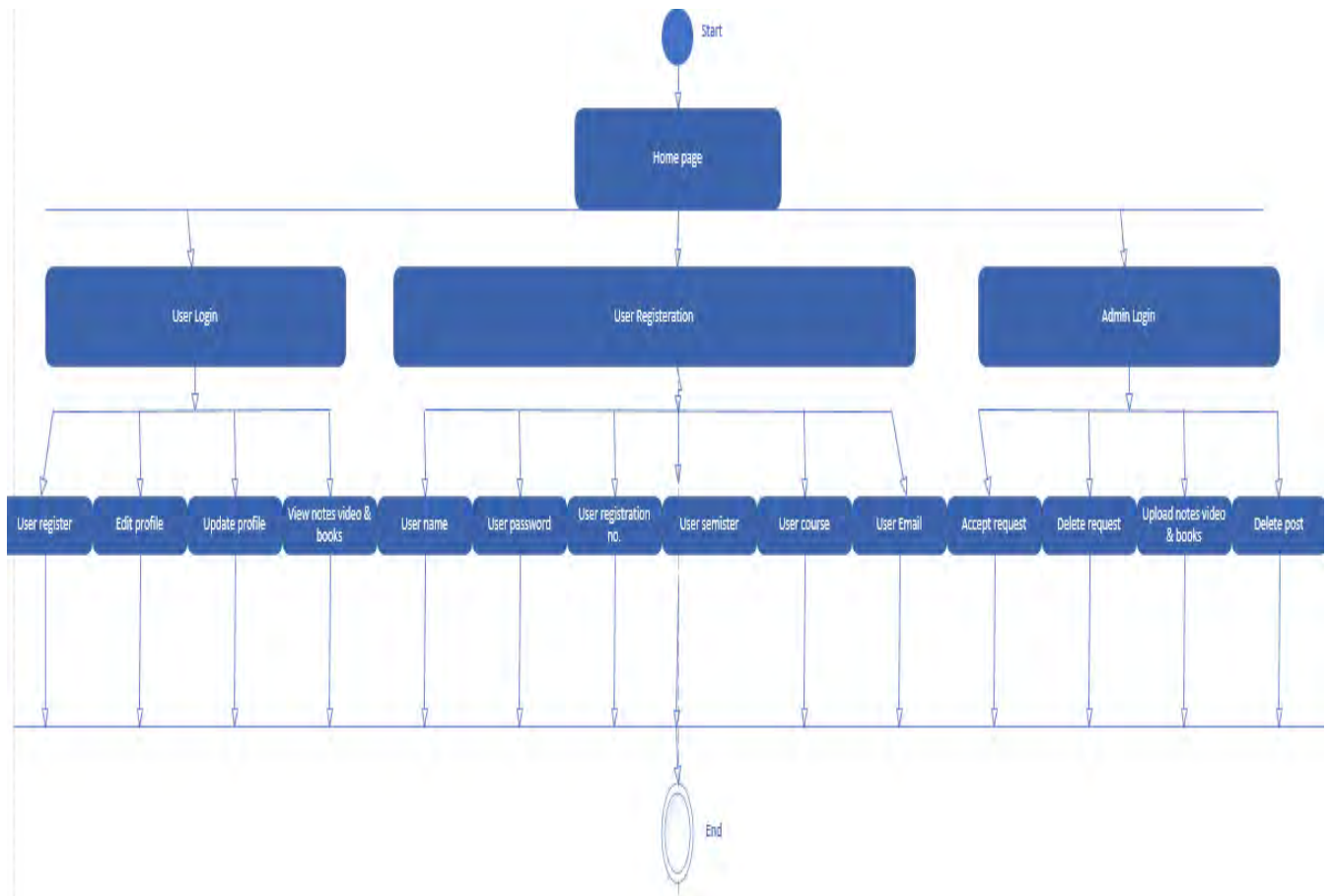
Figure 3.5: Activity Diagram for entire process

3.4 Entity Relationship Diagram (E.R.D)

An ER diagram displays the affiliation amid entity sets. An entity set is a collection of alike entities and these entities can have attributes. In terms of DBMS, an entity is a table or attribute of a table in database, so by displaying relationship between tables and their attributes, ER diagram displays comprehensive logical structure of a database.
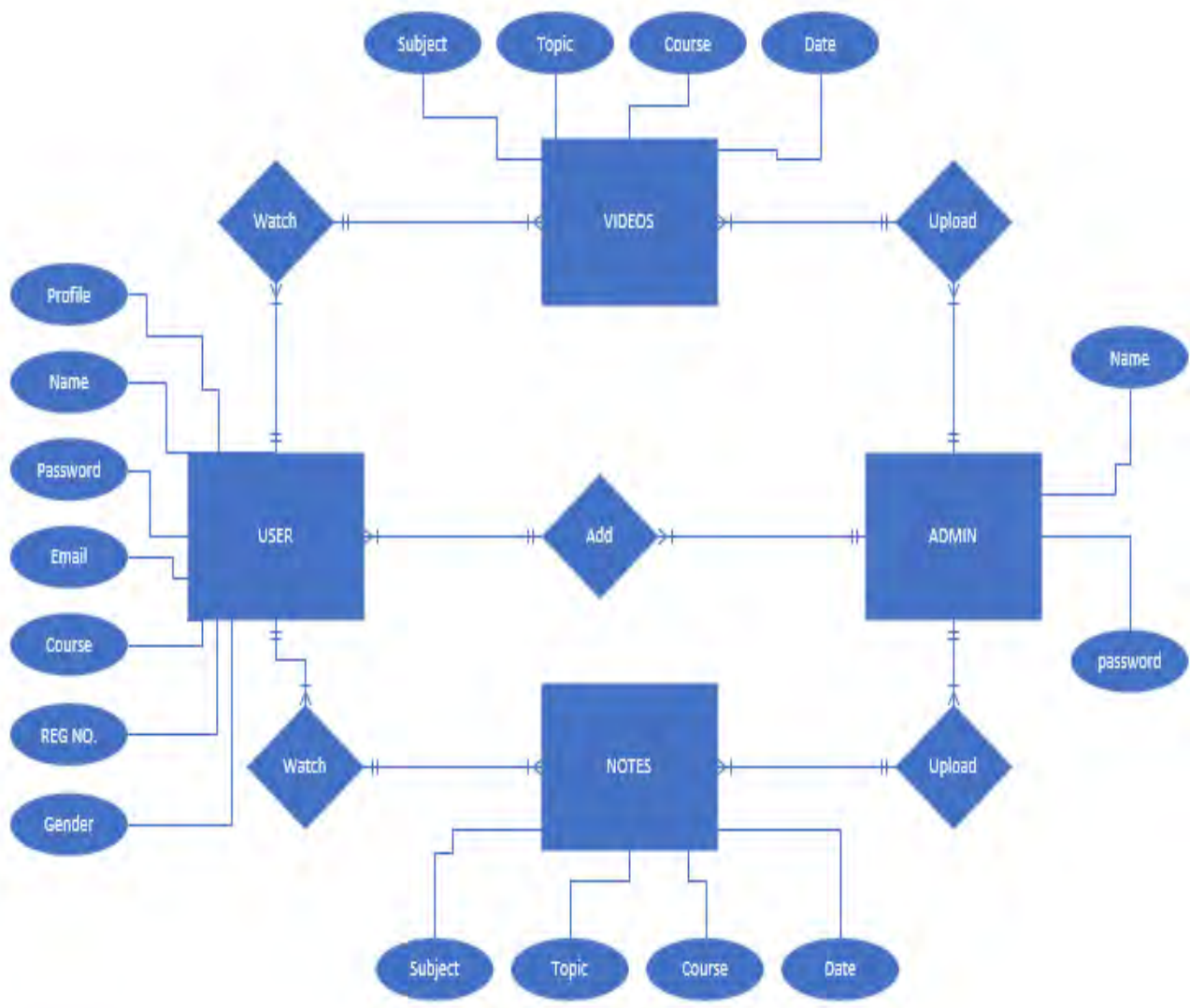
Figure 3.6: Entity Relationship Diagram (E.R.D)

3.5 Class Diagram

It is a type of static structure that describes the structure of a system by showing the system's classes, their attributes, operations or methods, and relationships among objects. The Class diagram describes the attributes and operations of a class. The purpose of the class diagram is to model the static view of a system. The class diagram shows a collection of classes, interfaces, associations, collaborations and contraints. It is also known as a structural diagram.

Class Diagram Notation:

A class notation consist of three parts:

1. **Class Name:**

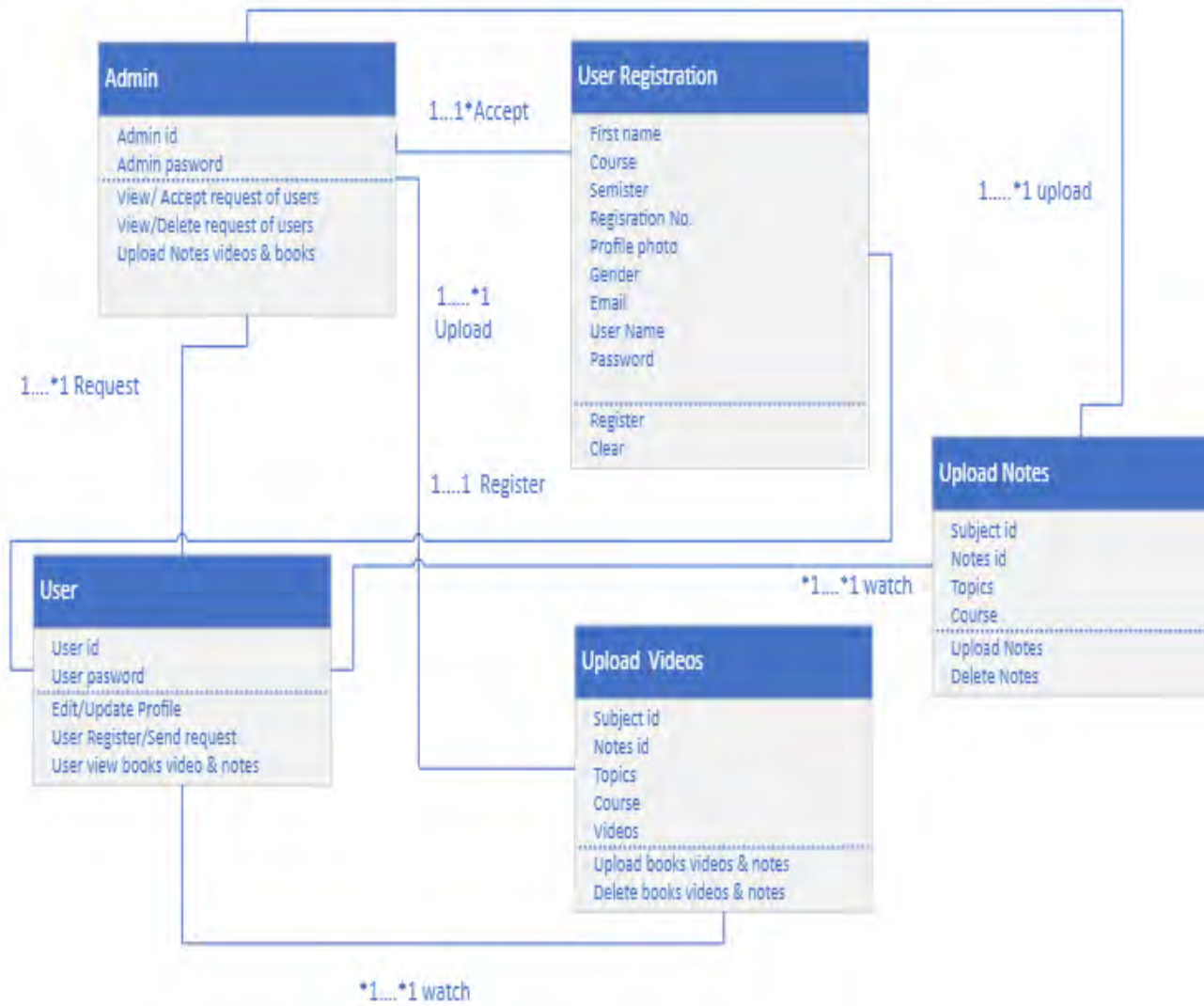➢ The name of the class appears in the first partition.

2. **Class Attributes:**

➢ Attributes are shown in the second partition.

3. **Class Operations(methods):**

➢ Operations are shown in third partition. They are services the class provides.

Class Relationships:

➢ Inheritence or Generalization
➢ Aggregation
➢ Simple Association
➢ Composition
➢ Depenency

Figure 3.7: Class Diagram for entire process

Chapter 4
Tools and Technology

4.1 Introduction

Subsequently completing the design stage, we step forward to implementation phase to transform our design into an executable and working product. Implementation is basically grasping the technical requirements of the system and then deploying them using various tools and technologies available at large extent in the world of internet. As we know that this system is web based, so it is needed to decide which tools and technologies we have to option for system development. In this chapter we will discuss about all possible options necessary for development and deployment of the system and which programming languages and tools we have used throughout the implementation phase.

4.2 Tool and Language Selection

It may not be a tough task for an experienced developer to choose from a never-ending list of tools and technologies, but for a beginner having no experience in the field; surely, it becomes a grim task.

Following are the tool and languages, which are being used for development of the system.

- Bracket
- Xampp
- Microsoft Visio
- PHP
- Bootstrap
- HTML
- CSS
- SQL
- MS word

4.2.1 Html

HTML was developed by WHATWG in 1993. It is the standard markup language for making Web pages. It stands for Hyper Text Markup Language and styles the structure of a Web page, which consists of a series of HTML elements. These elements tell the browser how to display the content and are represented by different tags. These tags label pieces of content such as "heading",

"paragraph", and "table. Browsers use these tags to render the content of the page.

4.2.2 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the appearance of a document written in a markup language like HTML. CSS is a bedrock technology of the World Wide Web, alongside HTML and JavaScript. World Wide Web in Consortium developed it on December 17, 1996. CSS is designed to enable the parting of appearance and content, including layout, colors, and fonts.

4.2.3 Bootstrap

Bootstrap is a free front-end framework for faster and less difficult web development, which includes HTML, and CSS based design templates for design, forms, buttons, tables, navigation, modals, image containers and many other, as well as optional JavaScript plugins. Bootstrap additionally offers the ability to easily create responsive designs which is creating those web sites that automatically adjust themselves to look good on all devices, from small phones to large desktop.

4.2.4 PHP

Rasmus Leadoff originally created it in 1994 and now The PHP Group produces it. PHP initially stood for *Personal Home Page*, but now it stands for the *PHP: Hypertext Preprocessor*. A widely used open-source general-purpose scripting language is specifically apposite for web development and can be implanted into HTML.

4.2.5 SQL

SQL stands for Structured Query Language. SQL is used to converse with a database. According to ANSI, it is the standard language for relational database management systems. SQL statements are used to carry out tasks such as update data on a database or retrieve data from a database. Some common relational database management systems that use SQL are: Oracle, Sybase, Microsoft SQL Server, Access, Ingres, etc. The standard SQL commands such as "Select", "Insert", "Update", "Delete", "Create", and "Drop" are mostly used to achieve nearly all tasks that one may need to do with a database.

4.2.6 Bracket

Brackets is a source code editor with a primary focus on web development. Created by Adobe Systems, it is free and open-source software licensed under the MIT License, and is currently maintained on GitHub by Adobe and other

open-sourced developers. The main purpose of brackets is its live [HTML](), [CSS]() and [JavaScript]() editing functionality.

4.2.7 Microsoft Visio

Microsoft Visio is a part of Microsoft family and formerly named as Microsoft Office Visio. Microsoft Visio is software designed to translate complex information from text and tables into diagrams. Visio diagrams facilitate communication by breaking down information and display it to be understood at glance.

4.2.8 Xampp

XAMPP is most dominant; free an open-source cross-platform, which is one solution to run your web services. XAMPP is developed by Apache Friends and released in May 2002. XAMPP Stands for Cross Platform(X), Apache (A), and MySQL (M) also Sometimes (M) refers to Maria DB, PHP (P) and Pearl (P).
Where, Cross-platform means it is accessible to multiple operating systems like, windows, Linux and MacOS. Generally, PHP developers prefer XAMPP tool while developing their web applications or projects. XAMPP tool offers easiest solution to run server and database that is of assistance for web developers to host their web application locally.

4.2.9 MS Word

Microsoft word is application software developed by Microsoft Inc. Microsoft is an American multinational technology company. It is word processing software. Microsoft Word is used to create, edit, print, and share professional-looking. documents such as applications, forms, templates, business cards, letters, paper, reports, and booklets by using Microsoft Word. All our project documentation is carried out in MS word.

4.3 Summary

This chapter provides the brief description on what tools and technologies adopted to implement the project.

Chapter 5
Interface

5.1 Introduction

User interface design is the design of user interfaces for different software or machines with a clear purpose: to make a better experience for users when navigating through your platform. The focus is to clarify the usability of various tools and create a great aspect. Your job is to make things as simple as possible, with clear and well-defined elements, such as buttons, icons, typography, and colors. The design process must be a perfect combination of technical functionality and aesthetic look. Because of that, it is very important not to draw unnecessary attention to elements, that can be a distraction from the essential functions of the interface.

Figure 5.2: E-Learning Home Page

Figure 5.3: User Registration Panel
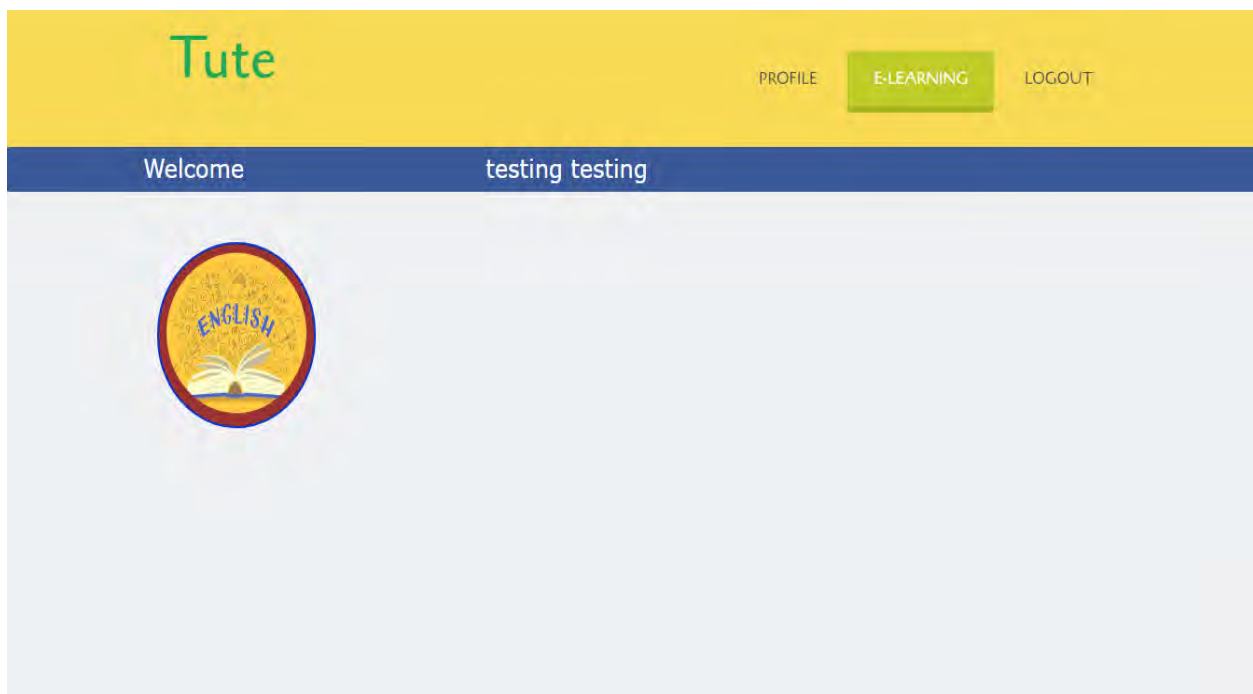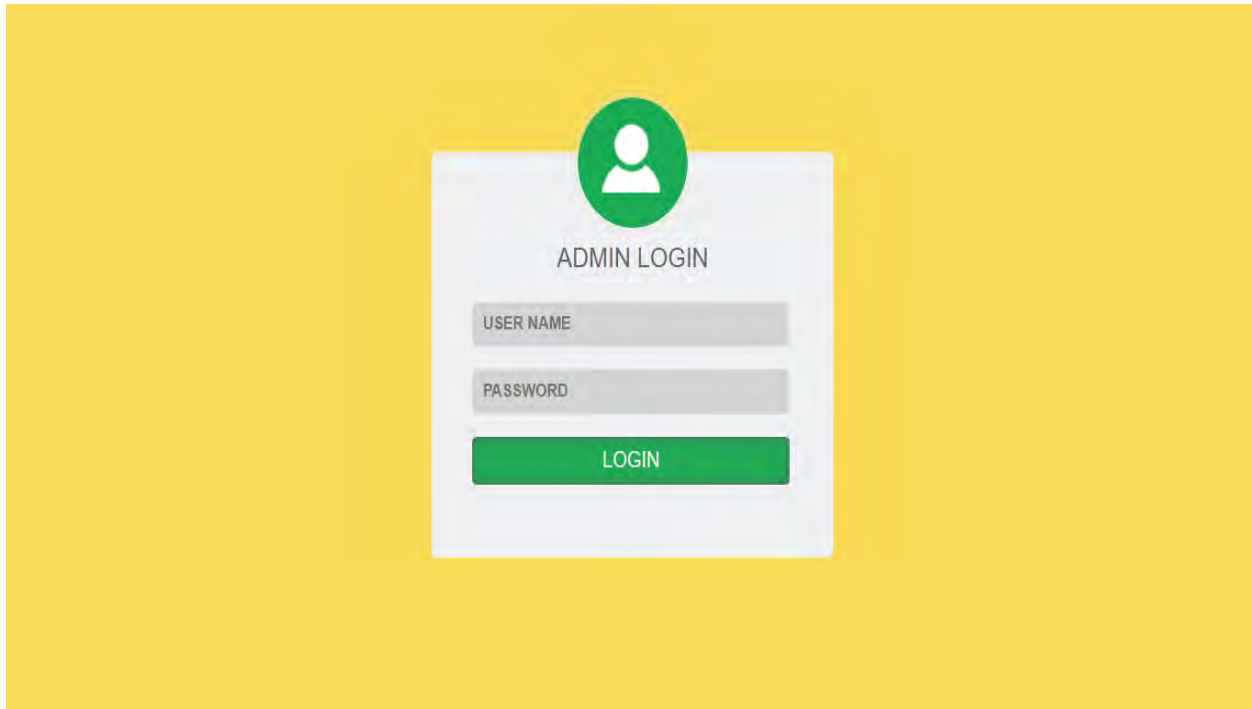

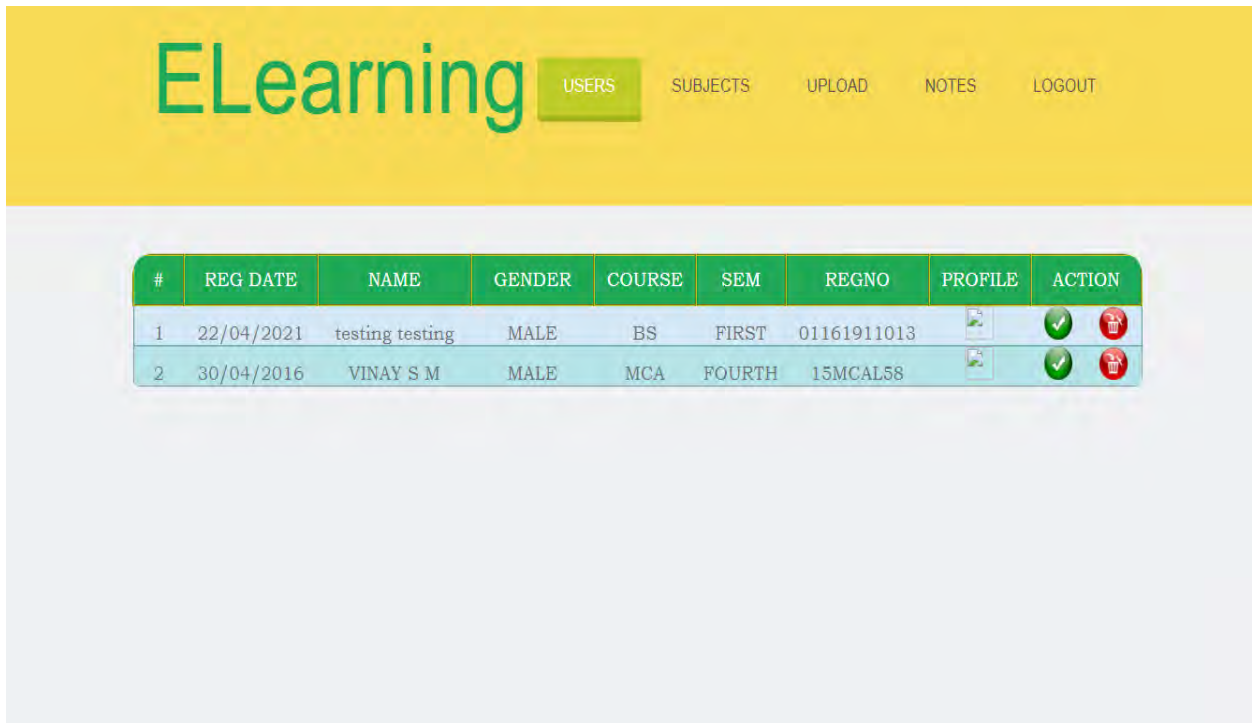**Figure 5.4: User Login Panel**
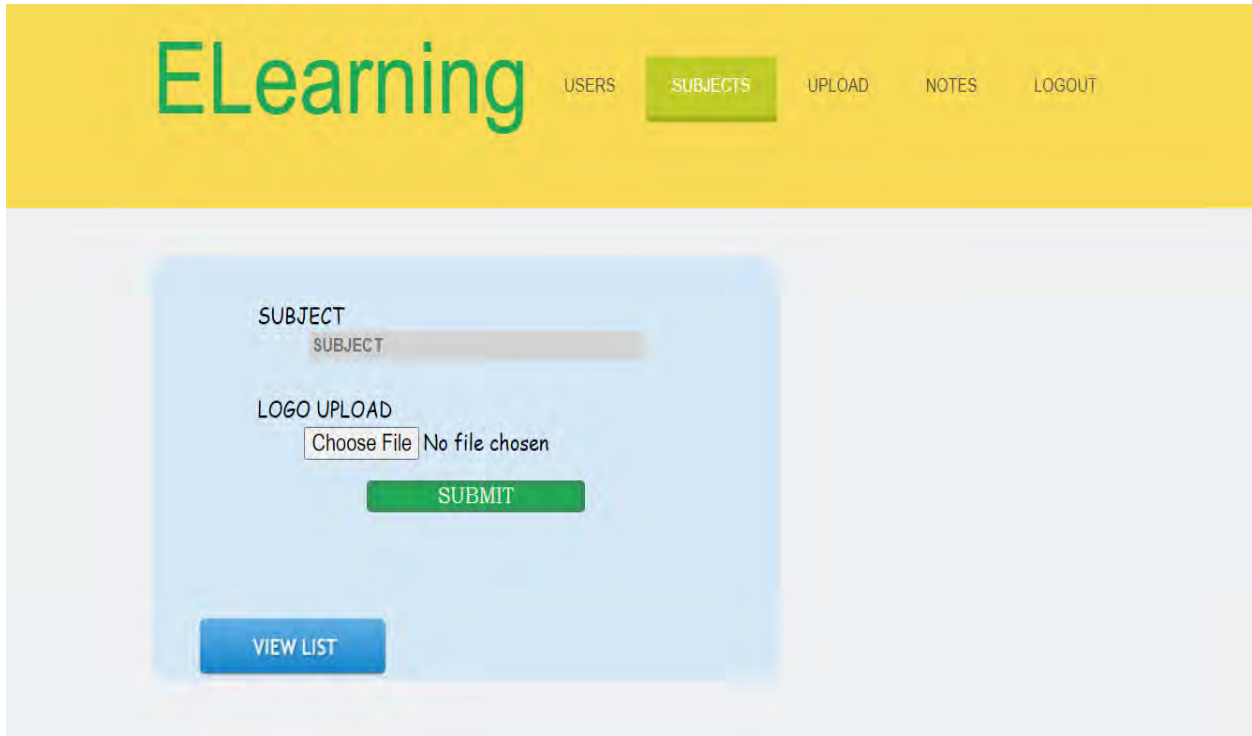
Figure 5.5: User Profile Page

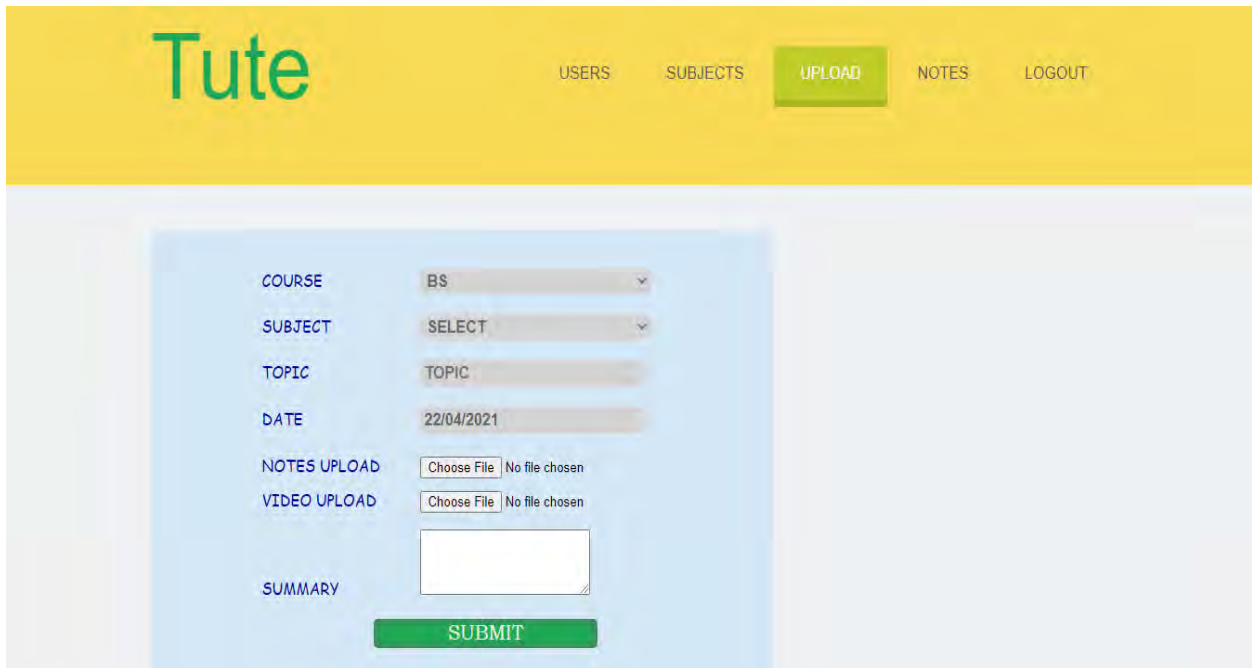**Figure 5.6: User Watch Video Notes Page**

Figure 5.7: Admin Login Panel

Figure 5.8: Admin Add the Users

Figure 5.9: Admin Add the Subjects

Figure 5.10: Admin Upload Video & Notes

| Tute | | USERS | SUBJECTS | UPLOAD | NOTES | LOGOUT |

ID	COURSE	SUBJECT	TOPIC	NOTES	VIDEO	ACTION
7	MCA	JAVA	INTRODUCTION	os_linux.pdf	bomb.mp4	🗑

Figure 5.11: Admin Watch Notes Video & Topic

Chapter 6
System Testing

6.1 Introduction

Software testing is a procedure to assess the functionality of a software application intending to discover whether the developed software met specified requirements or not and to detect the faults to confirm that the product is fault free to produce the quality product.

6.2 Software Testing Types

6.2.1 Manual Testing

Manual testing is the procedure of testing the software by hand to find the faults. Tester should have knowledge of the viewpoint of end-users to confirm that all features are working as stated in the software requirement document. In this course of testing, tester executes the test cases and generate the reports by hand deprived of using any automatic tools.

6.2.2 Automation Testing

Automation testing is the procedure of testing software using an automatic tool to discover faults. In this procedure, testers execute the test scripts and generate the test outcomes automatically by using various tools. Some of the well-known automation testing tools for functional testing are QTP/UFT and Selenium.

6.3 Testing Approaches

- White Box Testing
- Black Box Testing

6.3.1 White Box Testing

It is also termed as Glass Box, Clear Box, and Structural Testing. This testing is grounded on applications' internal code structure. In white-box testing, core viewpoints of the system as well as programming skills are used to design test cases. This testing is generally done at the unit level.

6.3.2 Black Box Testing

It is also termed as Behavioral, Specification-Based or Input-Output Testing. In this testing process, testers assess the functionality of the software under tests deprived of watching at the internal code structure of the software.

6.4 Test Cases

Some important functionality can be tested by the following test cases:

Table 6.4.1: Test Case of User registration

Description	In this test case "Registration" functionality of user is tested.
Setup	Registration using following details. 1-First Name　　　　11-Father Name 2- Last Name　　　　12-Mother Name 3-Date of Birth　　　　13-Course 4-Gender　　　　14-Semister 5-Address　　　　15-Register Number 6- City　　　　16-User Name 7-Pin Code　　　　17-Password 8-Mobile Number　　　　18-Confirm Password 9-Email ID　　　　19-Register 10-Profile photo　　　　20-Clear
Instructions	1-Zain　　　　11-ABCD 2- Ul Abedin　　　　12-DCBA 3-10-11-1994　　　　13-MSC 4-Male　　　　14-4th 5-Testing　　　　15-01161911013 6-Layyah　　　　16-testing 7-0606　　　　17-testing 8-03059049491　　　　18-testing 9-zainsani491@gmail.com 19-Register 10-pic.jpg　　　　20-Clear
Results	Registration successfully. Login now. If User ID is '' 01161911014' with password ''014' login failed.

Table 6.4.2: Test Case of User Login Panel

Description	In this test case, Log in functionality of user is tested. It shows that Log in, as user is only possible if user ID and password are correct.
Setup	Register as user with following credentials. User ID: 01161911013 User Password: 013
Instructions	Enter user ID: 01161911014. User Password: 014 Enter log in
Results	User ID as '' 01161911013'' with password ''013'' log in Successfully. User ID as '' 01161911014' with password ''014'' log in failed.

Table 6.4.3: Admin login panel

Description	In this test case, Log in functionality of Admin is tested. It shows that Log in, as Admin is only possible if user ID and password are correct. .
Setup	• Log in as Admin by entering user ID and password
Instructions	• Enter user ID: zain
	• User Password: zain
	• Press Log in
Results	Dashboard of E-learning appears after clicking on login button and all the activities will be shown.

Table 6.4.4: Test Case of upload Subject Name & Subject logo

Description	In this test case upload subject name and subject logo will be check and view the list of the subjects and logo is tested.
Setup	• Log in as admin by entering admin ID password and then click subject dialog box
Instructions	• Enter subject name
	• Enter subject logo
	• And then submit
Results	When submit successfully show the list of subject names with logo and delete option are present here.

Table 6.4.5: Test Case of upload notes and video

Description	In this test case admin upload notes and video with class, date, subject and topic related.
Setup	• Log in as admin by entering admin ID and password and then click the upload dialog box is open.
Instructions	• Select class: MSc
	• Select subject: Mathematic
	• Enter topic: Integration
	• Enter date: 10-05-2021
	Enter summary: abed and then submit
Results	When submit successfully show the list of subjects, course, topic, notes, video and delete option are present here.

Chapter 7
Conclusion & Future work

7.1 Future work

We can improve the system by adding more functionality like voice message live video camera and chat box to make or website more efficient in the future.

7.2 Conclusion

It has been a great pleasure for us to work on this exciting and challenging project. This project proved good for us as it provided practical knowledge of Programming language e.g., php &also provide opportunity to learn develop project as a team.

It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.