

A
Project Report
on
Depot of NBA Documentation

Submitted to the
Savitribai Phule Pune University, Pune
In fulfilment for the award of the Degree of
Bachelor of Engineering in Computer Engineering

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CERTIFICATE

This is to certify that Project entitled

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Abstract

NBA accreditation is now required before educational institutions can apply for autonomous status from universities, necessitating the development of a web portal system with the capacity to hold massive amounts of departmental and college-level material. The system aims to provide an online NBA documentation system that will be beneficial to educational institutions, particularly for information retrieval. Students and staff that log in to this system will have access to college-related information. The faculty would have access to a variety of reports, be able to monitor all student data, and create goals for programmes and courses, among other things. Users must register with the system in order to access the website, and once they have, they can access and alter data according to the rights granted to them. More precision will make the process easier, and professors will benefit from automation. The method reduces human labour as a result and creates technologically advanced solutions.

Keywords:- Web-portal, documentation, automation, educational institutions, system, information retrieval.

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Chapter 1

Depot of NBA Documentation

1.1 Introduction

There is a lot of information online in the current digital world, making it challenging to find what you're looking for. Information retrieval (IR) is the process of locating relevant information in large amounts of data that are stored in various formats. The importance of information retrieval cannot be overstated since it makes it possible for individuals and organisations to rapidly and easily retrieve relevant data that can help them with research, make informed decisions, and solve issues. The creation of a web gateway that will make it easier to obtain information requires this IR. The process of accreditation is essential for maintaining the standards and quality of education. It is a process that assesses academic institutions and programmes against a set of criteria. The National Board of Accreditation (NBA), an impartial organisation, was established by the Indian government to assess and accredit technical education programmes there.

The National Board of Accreditation (NBA), which was established by the AICTE, evaluates the quality of the programmes provided by technical and professional educational institutions that have received approval from the necessary statutory regulating organisations. As a result, we developed the "Depot of NBA documentation" web portal. To demonstrate compliance with the National Board of Accreditation (NBA) criteria, colleges must keep a sizable amount of documentation. The danger of errors and inefficiencies rises due to the time-consuming and difficult nature of managing this material. We suggest a new approach for handling NBA documents to overcome these difficulties by streamlining the procedure and making it simpler for universities to maintain compliance. Here the concept of maintaining all the documents related to NBA will be managed by a web portal giving the university an automated and online platform. It will help to maintain a huge amount of data online rather than a large amount of paperwork required to store information such as student/staff personal details, academic details, syllabus, and achievements. The super admin of the web portal is the head of the department and will handle the permissions to be given to the staff and students. The search field will help to find records of specific students. The username and password will help students/staff to login the website but if the session is timed out it

will log out the system automatically. The project's overarching objective is to provide a centralised, structured, and efficient accreditation process that promotes transparency, accountability, and data management. The project will help the accrediting board as well as the college by streamlining the accreditation process and reducing administrative burden.

1.2 Motivation

To assist educational institutions in meeting the growing demand for NBA accreditation, this project aims to develop an online system for NBA documentation. Departments and colleges will be able to store and retrieve enormous volumes of papers more conveniently with a web-based system. Through a login feature in the system, faculty and students will be able to obtain helpful information about the college. Faculty members will also be able to design programme and course objectives, monitor student statistics, and provide a variety of reports. The system will need users to register, and their access and modification privileges will be determined by the permissions they have been granted.

This system's implementation will offer a variety of benefits. Accuracy will be increased by digitising documents and reducing the chance of human error. The automation of jobs will reduce the workload for faculty members and provide them more time to focus on other important duties. The system will lessen manual work and provide technological alternatives to simplify activities within the educational institution. The online NBA documentation system seeks to improve effectiveness, accessibility, and accuracy in order to meet NBA accreditation standards and manage information within educational institutions.

1.3 Problem Statement

The increasing requirement of NBA accreditation for technical institutions to attain autonomous status from universities has created the need for a comprehensive web portal system capable of storing extensive documentation at the college and department levels. This project aims to develop an online NBA documentation system that facilitates information retrieval for educational institutions and colleges. By logging into the system, faculty and students can access valuable information about the college. Faculty members will have the ability to generate various types of reports, view student data, and establish course outcomes and program outcomes. Users need to register with the system to access and modify data based on their granted permissions. The implementation of this system will enhance accuracy, automate tasks for the faculty, reduce manual work, and provide technological solutions to streamline processes.

1.4 Objective

- To organize and improve accuracy of large amount of data.
- To update and delete data whenever required.
- To improve searching of data.
- To decrease time required for manual storing and searching of data.
- To maintain the course outcomes, program outcomes, program specific outcomes and relative mapping each and every activities and curriculum.

1.5 Project Scope and Limitations

Project Scope:

1. An application to be used by students, college professors, and management staff for managing all data related to the students and staff of the college.
 2. Apart from the existing data, all the new information about the students and management will be collected directly on the application, to improve searching of data.
 3. It would be hosted on a server so that it will be accessible remotely as well as on any device. Any changes required will be adapted with the same consistency.
 4. It will make sure that each module of the website is easy and smooth to operate.
- **Departmental information:** Through this service one can access the complete information about the college campus such as courses available, admission procedure, placements, college events, achievements etc.
 - **Student tracking:** Any company or any organization that want to check the summary about the student in the college, so that they will be able to choose the particular students for their campus placement and for that purpose they will be given a particular link through which they can access the information required.
 - **Activities :** It will give information about different activities that will be conducted by the computer department time to time. Information about these activities will be updated by administrator.

Limitations

- No one is able to access the application if the server is unavailable.
- If internet connection is not strong then user may have to face problems.

1.6 Methodologies of Problem Solving

To address the problem of developing an online NBA documentation system for educational institutions and colleges, the Waterfall methodology of problem-solving can be employed:

- **Waterfall Methodology :** Using the waterfall methodology, each stage of development—requirements collection, design, implementation, testing, and deployment—must be finished before going on to the next. It provides a systematic and organised process. According to the Waterfall technique, requirements are collected at the start of the project and used as a base for the design phase. After the design is complete, the implementation process starts, and after that, testing is done to make sure the system works as planned. When testing is finished and the system is considered to be stable, it is made available to users and maintenance tasks are carried out to address any problems that may occur.

Chapter 2

Literature Survey

Following literature survey is according to our system. It shows different research papers based on the concept of NBA documentation.

Table 2.1: Literature survey

Sr. no.	Date	Author	Title	Summary
1.	July 2022	C.Vinothini, C Tarun, K A Bhavana, G Nikhil Krishna, Advaith Praveen	NBA web portal: A Comprehensive Survey on NBA Accreditation and MERN Stack for the Purpose of Implementing a Portal	This paper explores the potential for the NBA accreditation process to even be completed digitally with the aid of a personalized web portal in addition to studying the various facets of NBA accreditation and assisting us in understanding its significance
2.	May 2022	Praveen Kumar, Tripti Sihirra, Sandeep	College Management System	A web-based tool called CMS seeks to give information to all management levels inside a business. The college can utilize this system as an information management system
3.	June 2019	Manish Kumar Thakur	Smart College Management System	This paper describes two modules to make up the suggested work: A. Student B. Teacher C. Admin. Students must provide their name, college registration number and university registration number in the student's module

Table 2.1: Literature survey

Date	Author	Publisher	Title	Summary
4.	2015	Liangqiu Meng	College Student Management System Design Using Computer Aided System	In this he have implemented a hierarchical framework to arrange the suggested college student management system, which consists of four layers: a web display layer, a business logic layer, a data access layer, and a database layer
5.	April 2014	Shadrack B Kweingoti	Library Management System	An online program called Library Book Management System was created and engineered with the only purpose of automating library services
6.	March 2014	Shrikant kokate	Colege: An ERP for educational Institute	This gave the information about importance of ERP system that it is impossible to retrieve information from paper files, staff members waste time each month manually inputting data that should be performed automatically

Chapter 3

Hardware & Software Requirements

3.1 Introduction

All of the requirements for project development are listed in the software requirement specification document. We must have a thorough understanding of the software system in order to develop it. To accomplish this, we must maintain constant contact with consumers (end users) in order to acquire their requirements.

The "Depot of NBA Documentation" will be a web-based application for educational institutions. By giving this tool to aid faculty and students in their educational years, this system will be intended to enhance their productivity and performance. We intend to provide the required assistance, suggestions, and guidance in this area via an online platform to empower the students.

3.2 Assumptions and Dependencies

Given below are the assumptions and dependencies :

1. Operating system: The operating system that this system can run on, such as Windows, macOS, or Linux, may have special requirements.
2. DBMS (Database management system): To store and administer the system's data, a DBMS like MySQL, PostgreSQL, Oracle, or Microsoft SQL Server is typically required.
3. Programming Language: A specific programming language, such as Java, C sharp, PHP, or Python, may be used to create the system. Installing that language's suitable runtime environment or interpreter is necessary.
4. Frameworks and Libraries: The system may rely on frameworks and libraries like Django, Ruby on Rails, Laravel, or ASP.NET to simplify development duties and offer essential functionality, depending on the development methodology.
5. Front-end technologies include JavaScript, HTML, and CSS frameworks. To create responsive and interactive UI components for a system with a web-based user interface,

js can be needed.

6. Networking Infrastructure: In order to facilitate communication between its sections and with outside services, the system may be dependent on network elements such as routers, switches, and firewalls.
7. Security Tools: The system may need security tools like firewalls, antivirus software, intrusion detection systems (IDS), and encryption techniques to maintain data protection and defend against attacks.

3.3 Functional Requirements

- All the users of the system should be able to sign up (if new user) wherein they will use their email id and self-password (so that no person outside the institution can sign up with this portal) to log in into the portal and fill out a basic registration form containing information about their personal details.
- Colleges must be able to upload and maintain any NBA-required documentation, such as self-studies, program evaluations, and accreditation reports, using the system. Moreover, version control and document tracking must be supported by the system.
- The system should be able to map CO's and PO's for each assessment into the syllabus. The system should be able to provide a search function to allow users of the portal to find specific documents quickly and easily.
- The system must have reporting capabilities that let users create unique reports on the status of their documents, student/faculty personal details, syllabus and other important indicators.
- Students should be able to view their profile/dashboard after logging in so that they can navigate to different action tabs and access the required functionality/feature.
- Students should be able to fill the feedback form provided by the respected faculty. Faculty and HOD should be able to view details(academic/sports or achievements).

3.4 External Interface Requirements

3.4.1 User Interface

For the user interface of the web application we are planning to use standard configuration which is ease of use and supports best user interaction with the system and interactive user interface. The following modules will be provided:

1. An independent login and sign up screen will be provided to each entity of the system like student, faculty and administration.
2. After successful login into the system each entity can view the information which belongs to them.

3. After login into the system each entity will be redirected to the dashboard where they can perform the operations.
4. Able to achieve error free attainment calculation of grades, portion, attendance, etc.
5. Allow users to access and generate various reports such as feedback, course outcomes, program specific outcomes and various attainment reports in between real hours.
6. Identify the level of attainment for an individual subject.

3.4.2 Software Interface

The software package is developed using HTML,CSS,JS as front end.

1. Operating System: Windows XP,windows 7 and higher versions
2. Language: HTML,CSS,JS and PHP
3. Database: MySQL Server(back end)

3.4.3 Hardware Interface

Since neither the mobile application nor the web portal have any designated hardware, it does not have any direct hardware interfaces. Any browser can be used to access the web app.

3.4.4 Communication Interface

TCP/IP is the main communication protocol used to transmit data between the clients and the servers. All the upper level communications carried out between the web server and its clients are done using HTTP. The system is also connected to World Wide Web.

3.5 Non Functional Requirements

3.5.1 Performance Requirements

1. **Response time :** Over reasonably common internet connection speeds, the server fetches the results and respond to client requests within minimal amount of time.
2. **Storage :** As we have used MySQL to store data, so it effectively allows us to store and retrieve data.
3. **Hours of operation :** The system is always available during the hours it is most popular as it is an online platform.
4. **Locations of operation :** The availability of the system is not affected by the geographic location of the server, ensuring that the application is always accessible without any physical geographical limitations.

3.5.2 Safety Requirements

Safety Requirements are as follows:

1. Input validation is a crucial step in ensuring that only correctly formatted data is allowed to pass through the workflow of a web application. Its purpose is to prevent the processing of faulty or potentially corrupted data, which could otherwise lead to the malfunctioning of downstream components.
2. The admin login can be accessed only by the staff and the HOD hence will reduce the security danger to the system. Also, data will never be transmitted to unauthenticated sources. The data will always remain confidential. There will be no loss and theft of the information.

3.5.3 Security Requirements

Only the Principle/ HOD and the faculty have access to the Superadmin and admin logins, reducing the security risk to the system.

Additionally, data will never be forwarded to unreliable sources. The information will always be kept private.

The information won't be misplaced or stolen.

3.5.4 Software Quality Attributes

Given are software quality attributes:

1. **Adaptability** :The system possesses the ability to adapt itself or its environment, thereby enhancing its effectiveness as it scales up to accomplish its present or future objectives.
2. **Availability** :The system will be accessible and ready to perform its task whenever it is requested to be used.
3. **Correctness** :The system possesses the capability to execute its designated tasks precisely, adhering to the specifications defined for them.
4. **Flexibility** :The system possesses flexibility to accommodate changes in both environmental factors and usability requirements without necessitating any specific alterations to its details.
5. **Reliability** :By retrieving the relevant pages for the user, this attribute verifies that our system can operate without any failures within a specific timeframe and in a given environment.
6. **Usability** :Our system's user interface (UI) is straightforward, which improves the quality of the user experience when they interact with it and experience its efficacy, efficiency, and general satisfaction.
7. **Maintainability** :This system is maintainable because it is possible to fix, enhance, and comprehend the new alterations in the system's later stages.

3.6 System Requirements

3.6.1 Database Requirements

1. MySQL:

MySQL is a well-liked and frequently used RDBMS that offers a reliable and scalable platform for storing, managing, and retrieving structured data. It is well known for its dependability, performance, and usability, making it a top choice for a wide range of applications, from little projects to complex systems.

3.6.2 Software Requirements

1. XAMPP Server: XAMPP Server is a cross-platform web server package developed by Apache Friends, offering a free and open-source solution stack. It primarily includes the Apache HTTP Server, MariaDB database, and interpreters for PHP and Perl scripts.
2. **Operating system (OS):** It is a program that manages all other application programs in a computer after being loaded by a boot program. Applications interact with the OS through a defined application program interface (API), making requests for services. Windows or Linux can serve as the operating system.
3. **Sublime Text:** Sublime Text is a lightweight and versatile text editor renowned for its speed, extensive customization capabilities, and broad language support. It features a minimalist interface, powerful functionalities like multiple selections and split editing, making it a popular choice among developers and coders.

3.6.3 Hardware Requirements

1. i3 Processor: The i3 processor is a dual-core processor with an integrated GPU, succeeding Intel's Core 2 series. It is compatible with mobile, desktop, and embedded devices.
2. RAM (Random Access Memory): RAM is the hardware in a computing device that stores the operating system (OS), application programs, and currently used data for quick access by the processor. It serves as the primary memory and offers faster read and write speeds compared to other storage types like HDDs, SSDs, or optical drives.
3. Desktop/Laptop: A desktop represents a computer display area that mimics objects typically found on a physical desk, such as documents, phone books, telephones, references, writing and drawing tools, and project folders. It encompasses both desktop and laptop computers.

3.7 Analysis Models

The Process model used in our project Depot of NBA Documentation is a waterfall model. The waterfall model is a sequential approach to software development in which the processes of requirements analysis, design, implementation, testing, deployment and maintenance are sequentially completed. The following steps would be included in the waterfall model's development of the Depot of NBA Documentation:

1. Requirement Analysis: This includes gathering and describing requirements for our website. Identifying the system's functional requirements, such as faculty and student registration, academic information, exam information, and extracurricular activities, as well as non-functional requirements, including security and scalability, is part of this phase.
2. Design: In this phase, we have developed the system architecture and design based on the requirements stated in the previous phase. In this phase, system diagrams, data models, and user interface designs are all created.
3. Implementation: In this phase, actual development of our system takes place. It includes writing codes, operating databases and implementing user interfaces.
4. Testing: The system is tested once the implementation phase is finished to make sure it satisfies all the requirements that have been defined during the requirement analysis phase. This includes functional testing, performance testing and security testing.
5. Deployment: When the functional and non-functional testing is complete, our system is prepared for deployment in the environments of the HOD, principle, faculty, and students.
6. Maintenance: After the system's deployment, continuing maintenance is necessary to resolve issues that develop over time, fix errors, and make changes in response to user feedback.

The waterfall model offers a structured approach for developing our system and can be useful in ensuring that the system meets the requirements of stakeholders.

3.7.1 User Classes and Characteristics

The main users of this system would be the Principal/HOD, Faculty and Students. Each of these users will have their own classes and respective functionalities.

- Characteristics of Principal/HOD as an user :

Principal/ HOD will have access to each every module in this web-based application. Principal/ HOD can view and add faculty as well as students into a system as well as can print reports or a particular information as he wants.

- Characteristics of Faculty as an user :

Faculty can view and add Students. They can generate reports. The faculty would have access to a variety of reports, be able to monitor all student data, and create goals for programmes and courses, among other things.

- Characteristics of Students as an user :

Students can view their profile and can make necessary changes in their profile. In the mentorship module, individuals are required to input the necessary information as per the instructions provided by their mentors.

Chapter 4

System Design

4.1 System Architecture

A system architectural diagram is a type of system diagram used to represent relationships, restrictions, and boundaries between components as well as the overall structure of a software system. It is a crucial tool since it offers a comprehensive perspective of the software system's physical deployment and its development plan.

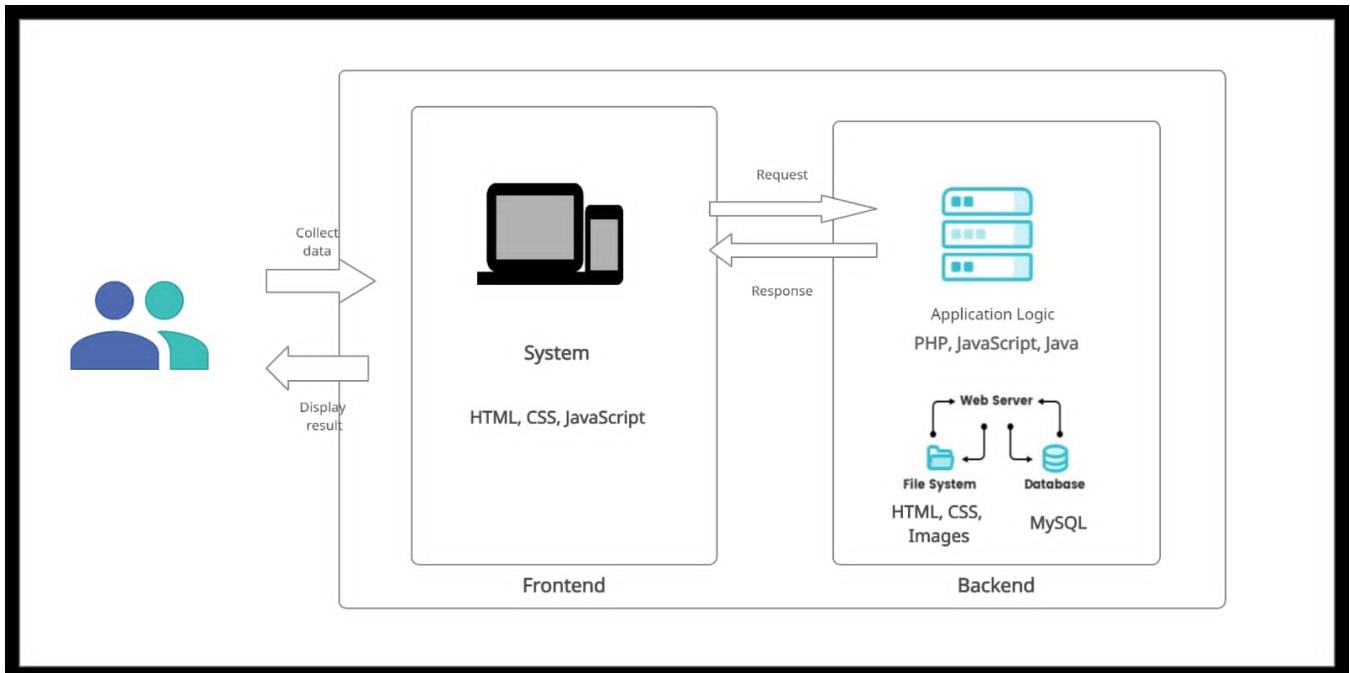


Figure 4.1: System Architecture Diagram

4.2 Mathematical Model

A college management system typically involves multiple sets of relationships. Here are some examples:

- Student-Course relationship: A student can able to learn more than one course, and each course may have a number of individuals enrolled in it. This relationship is many-to-many.

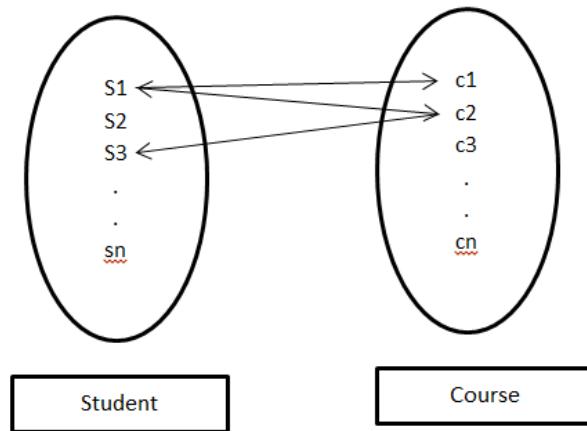


Figure 4.2: Student-Course relationship

- Course-Faculty relationship: Faculty may teach many courses, but only one faculty may be assigned to any given subject. This relationship is many-to-one.

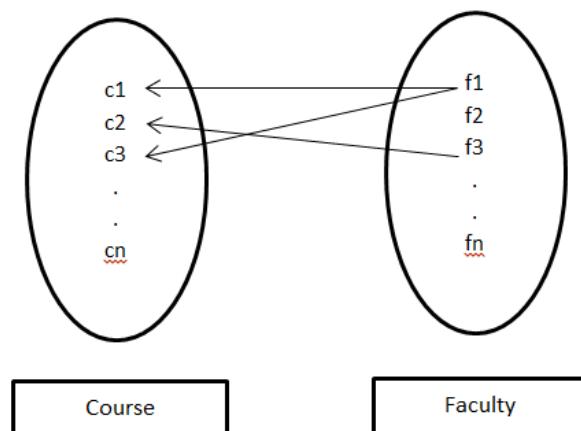


Figure 4.3: Course-Faculty relationship

- Faculty-Students relationship: There can be more than one faculty for a student, and there can be more than one student for each faculty. This relationship is many-to-many.

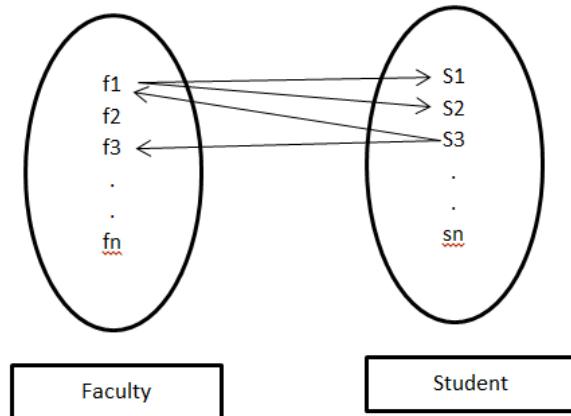


Figure 4.4: Faculty-Students relationship

- Superadmin-Faculty relationship: Superadmin may have more than one faculty under him/her, but only one superadmin is head of all the faculties. This relationship is one-to-many.

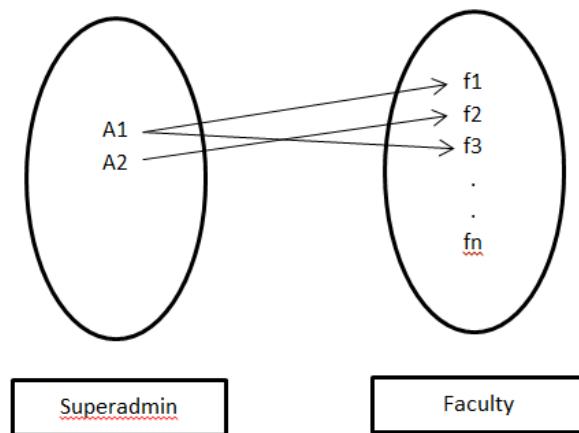


Figure 4.5: Superadmin-Faculty relationship

- Superadmin-Student relationship: Superadmin may have more than one student under them, but only one superadmin is head of all students. This relationship is one-to-many.

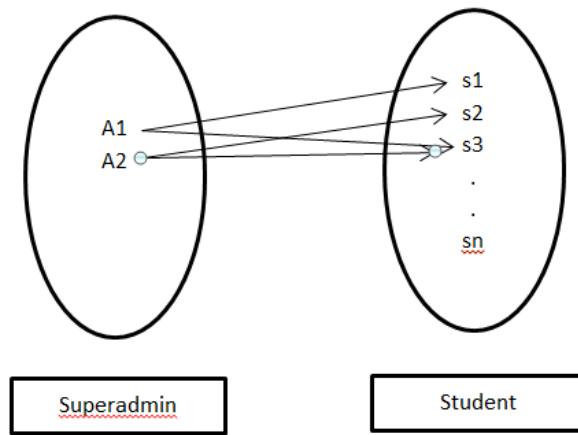


Figure 4.6: Superadmin-Student relationship

4.3 Data Flow Diagram

A data flow diagram (DFD) illustrates the information flow within a process or system by utilizing symbols such as rectangles, circles, and arrows, accompanied by concise labels. It visually represents data inputs, outputs, storage locations, and the pathways connecting them.

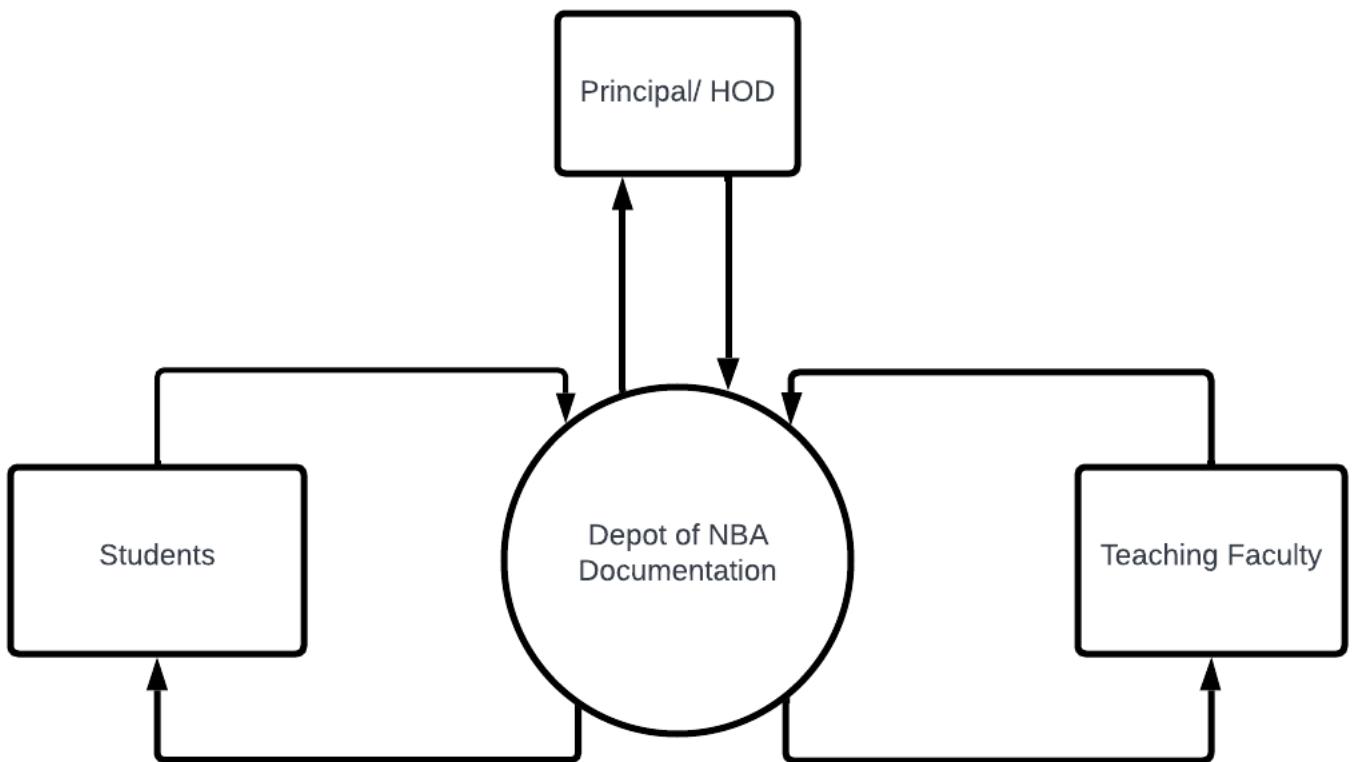


Figure 4.7: Data Flow Diagram

4.4 Entity Relationship Diagram

An Entity relationship Diagram (ERD), also known as an Entity Relationship Model, is a graphical representation that depicts relationships among the various entities (like people, objects, places, concepts or events). In the figure 7.1, we can see that the main entities involved in the system are : Super admin, Admin, Student each having their own attributes like id, password, etc and related to each other via one to one, many to one, etc relationships.

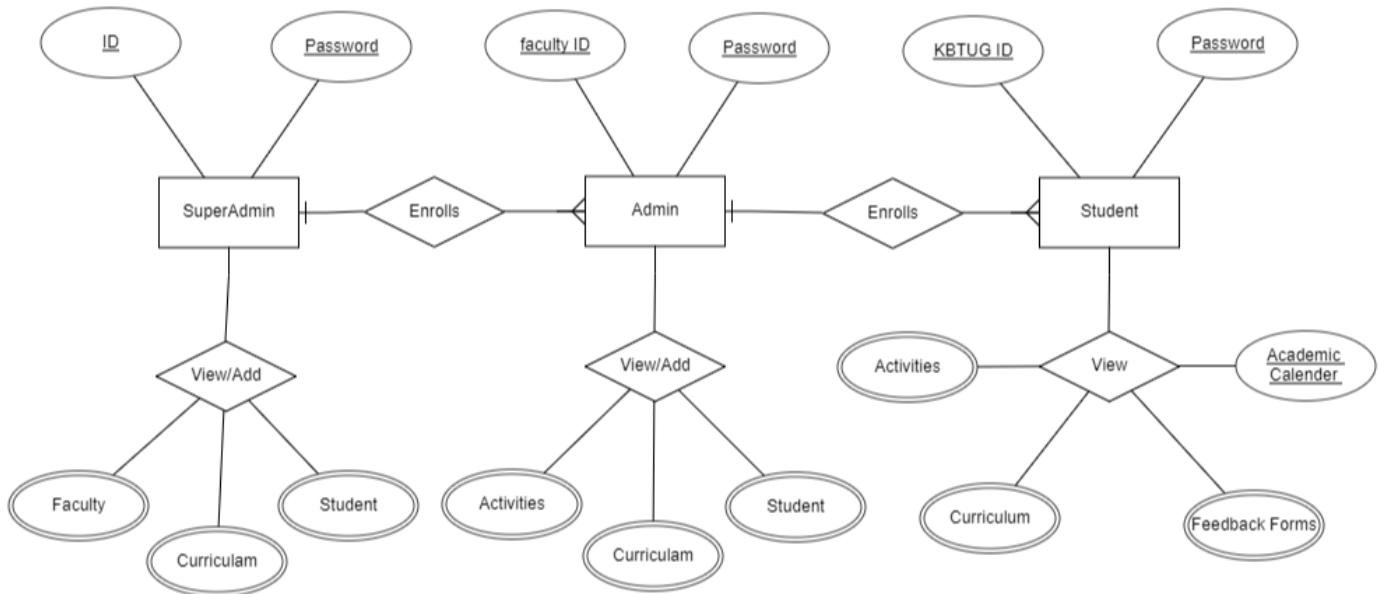


Figure 4.8: Entity Relationship Diagram

4.5 UML Diagrams

A UML diagram utilizes the Unified Modeling Language to visually depict a system, including its actors, roles, actions, artifacts, or classes. It aids in comprehending, modifying, preserving, or documenting system information. Figure 7.2 illustrates the categorization of UML diagrams.

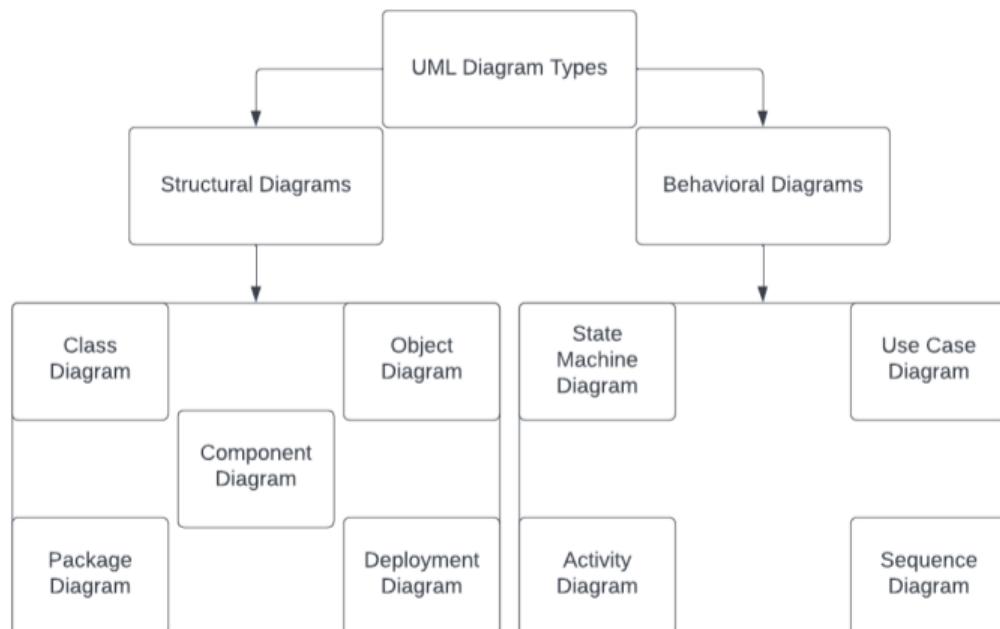


Figure 4.9: UML Diagram

4.5.1 Activity Diagram

Activity Diagrams illustrate the coordination of activities to deliver a service, showcasing different levels of abstraction.

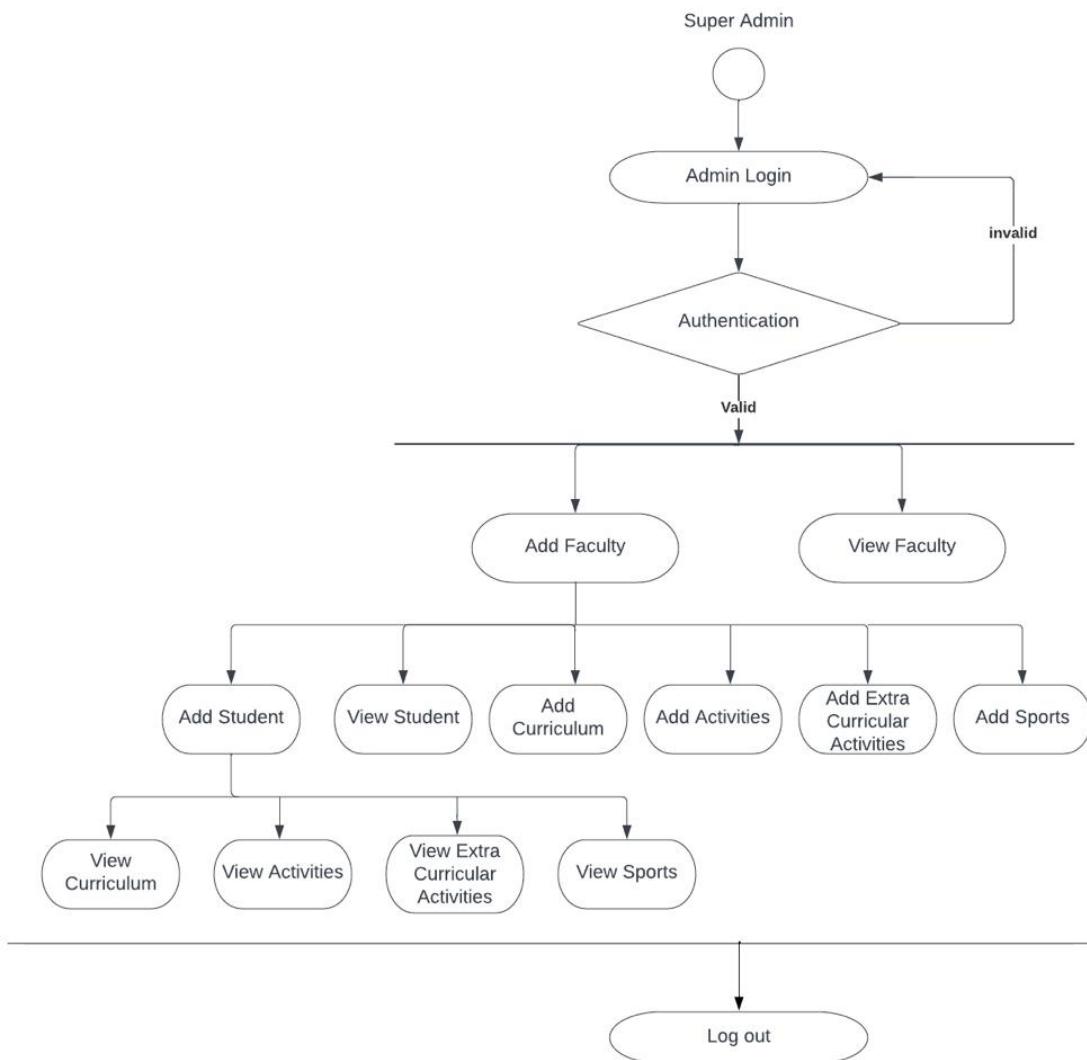


Figure 4.10: Activity Diagram

4.5.2 Class Diagram

The class diagram presents a static perspective of an application, portraying the object types and their relationships within the system. It depicts objects within a class and potential inheritance. Class diagrams aid in visualizing, documenting, and constructing executable software code, capturing various aspects of the system.

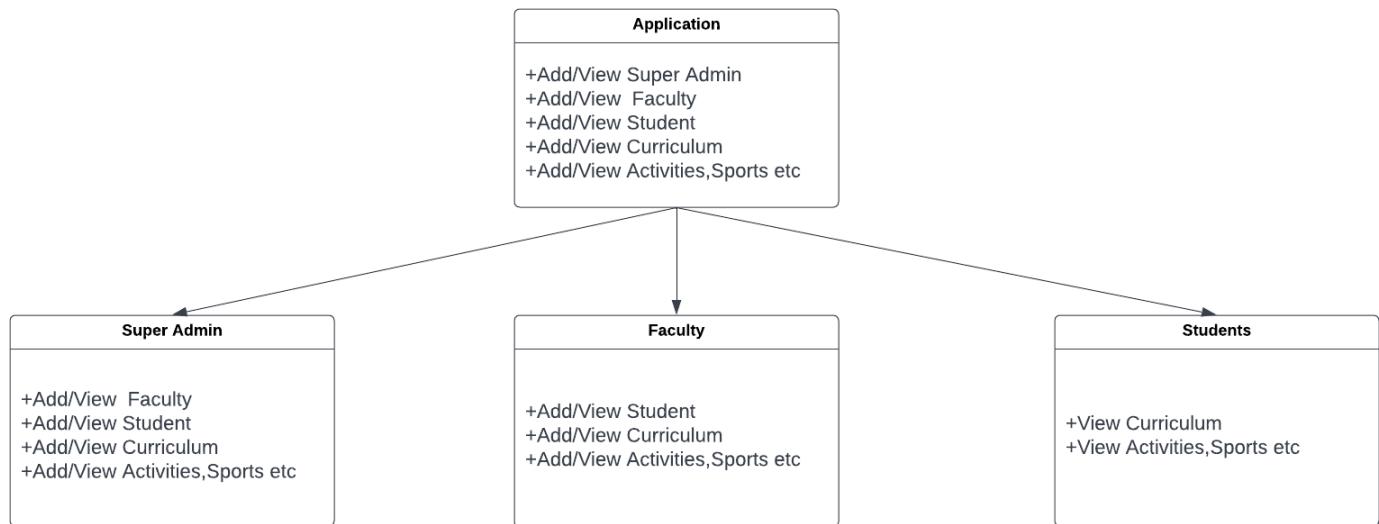


Figure 4.11: Class Diagram

4.5.3 Use Case Diagram

A use case diagram is employed to depict the dynamic behavior of a system, encompassing its functionality through the inclusion of use cases, actors, and their interconnections. It models the essential tasks, services, and functions necessary for a system or subsystem within an application.

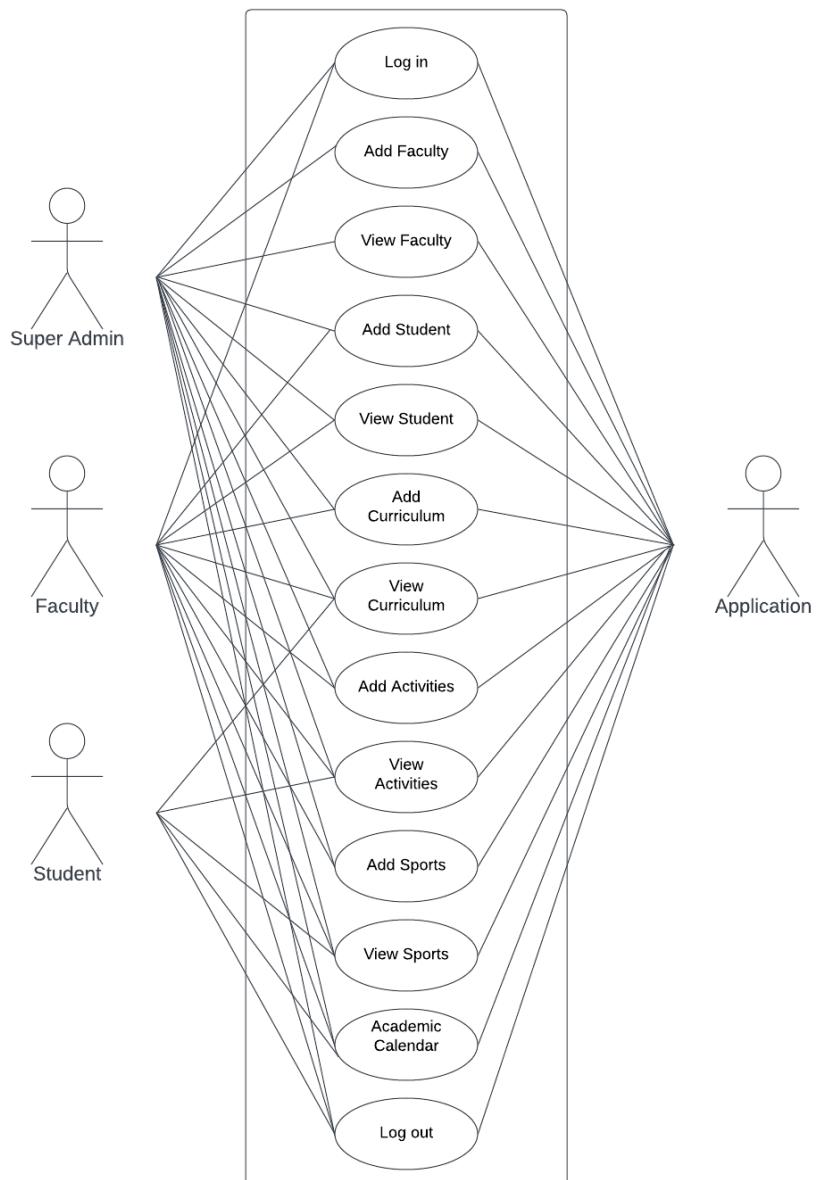


Figure 4.12: Use Case Diagram

4.5.4 Sequence Diagram

A sequence diagram is a UML diagram depicting the order of messages exchanged between objects during an interaction.

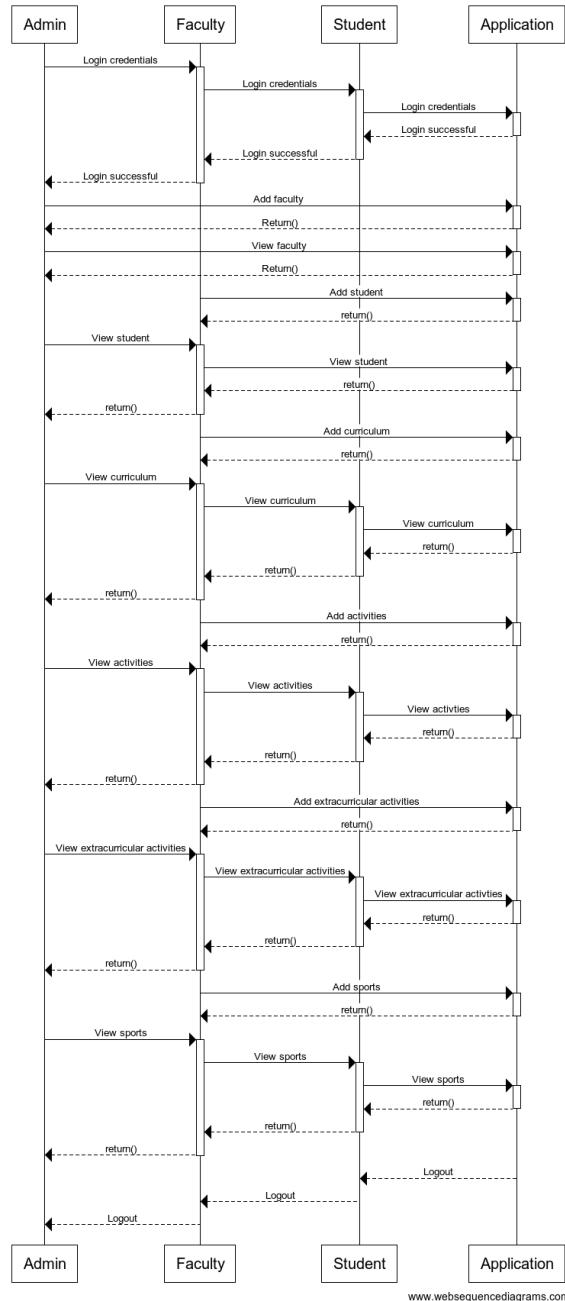


Figure 4.13: Sequence Diagram

4.5.5 State Diagram

State diagram, also called a state machine diagram, is a UML behavioral diagram that illustrates transitions between different objects.

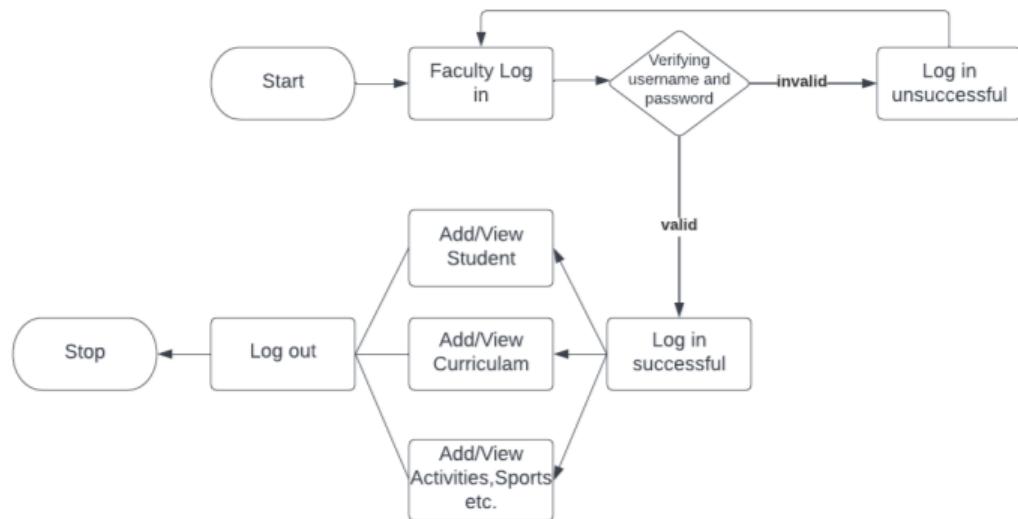


Figure 4.14: State Diagram-1

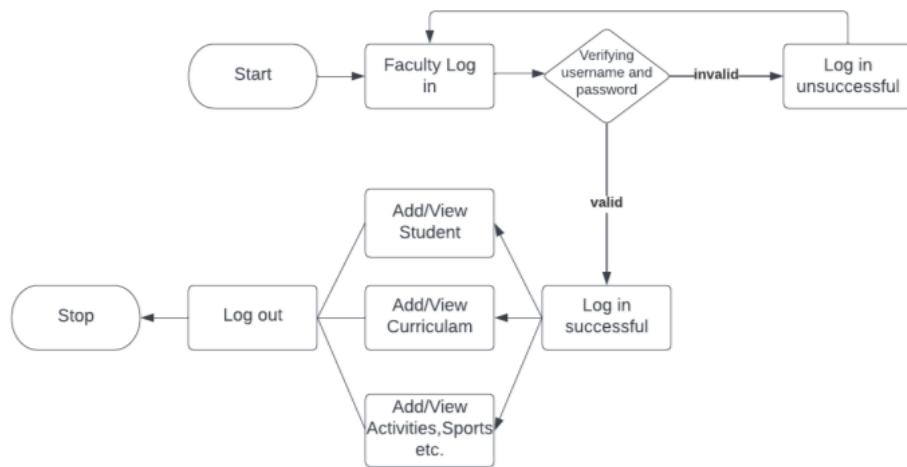


Figure 4.15: State Diagram-2

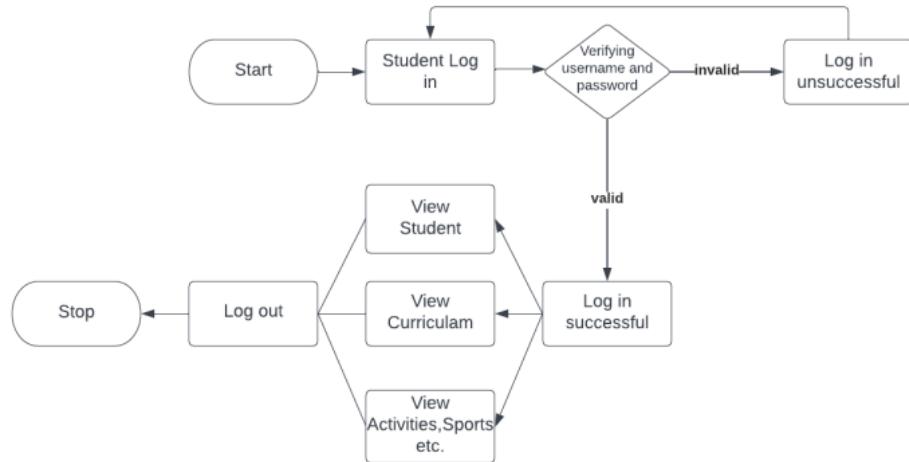


Figure 4.16: State Diagram-3

Chapter 5

Project Plan

5.1 Project Estimates

Project tasks	Estimated days
Literature Survey	30 days
Base paper study	15 days
Requirements study	15 days
Designing of project	15 days
UML diagrams	15 days
GUI finalization	8 days
Coding	90 days
Validations and testing	30 days
Documentation	20 days

Table 5.1: Project Estimates

5.1.1 Reconciled Estimates

Using Constructive Cost Model (COCOMO first model) for estimating the effort required in completing the project. Like all the estimation models, the COCOMO first model requires sizing information. This information can be specified in the form of:

- Object Point
- Function Point (FP)
- Lines of Source Code (KLOC)

For our project, we use the sizing information in the form of Lines of Source Code. Using COCOMO Model:

- Calculate Effort:

$$Effort = a(KLOC)^b$$

$$Effort = 3(10)^{1.12}$$

$$Effort = 39.54 \text{ person-week}$$

- Calculate Time:

$$Time = c(Effort)^d$$

$$Time = 2.5(39.54)^{0.35}$$

$$Time = 9.05 \text{ weeks}$$

- Person Required:

$$PersonRequired = Effort / time$$

$$PersonRequired = 39.54 / 9.05$$

$$PersonRequired = 4.3 = 4$$

- Cost of Project:

$$Cost = AssumedSalary * Personrequired$$

$$Cost = 1,20,000$$

5.1.2 Project Resources

The resources needed for the project's effective development and completion are referred to as project resources. These resources can include capital, people, tools, or supplies like hardware and software to complete the project's tasks.

1. **Human resources:** Humans are essential to the growth of projects. All three of us worked together on our project to complete the various project tasks. The project stages were assigned to each member according to the project modules. All of the members supported the requirement gathering process. One member handled the front end, and two others handled the back end. The design of the user interface was a collaborative effort. With the assistance of all the members, testing and validations were also completed.
2. **Reusable components:** It is advantageous to use some ready-made software components in order to quicken the software development process. The focus on reusing is made possible by using such components. To make the designing process easier, we used bootstrap for this project.

3. **Hardware and software tools:** Hardware and software resources are the tangible resources needed to develop a project. The computer system with the appropriate memory, RAM, and other attributes is considered a hardware resource. Sublime Text, Chrome for database management, and Bootstrap for styling and designing are the software programmes utilised.

5.2 Risk Management

5.2.1 Risk Identification

1. Theft and Loss: Educational institutions face the risk of unauthorized users accessing sensitive data and causing harm through theft or loss. Unsafe data: Insufficient safety measures when sharing files and documents on websites, smartphones, and tablets over internet networks can lead to unauthorized access and exposure to risks.
2. Negligence: Storing data on computers or laptops can result in accidental file deletion or unauthorized access, posing a risk to the confidentiality of information.
3. Third party APIs: Integrating third-party applications into the system using institution credentials exposes the institution and its data to potential risks.

5.2.2 Risk Analysis

Our system's risk analysis entails locating, evaluating, and minimising any threats to the performance, security, and operation of the system. The steps in performing a risk analysis are as follows:

1. Identify any risks that could have an influence on this system. Analysing components of the system, procedures, and interactions with external entities can do this. Data breaches, system failures, unauthorised access, integration problems, user resistance, and regulatory compliance are examples of typical hazards.
2. Risk Assessment: Evaluate the listed risks by determining their likely occurrence and potential impact. Based on the risk's severity and likelihood, give each detected risk a risk rating. As a result, risks can be prioritised for mitigation actions.
3. Techniques for Risk Analysis: Analyse risks using a variety of techniques, including the following:
 - (a) Vulnerability Assessment: Identify areas where the system's operations, software, or infrastructure may be vulnerable to attack.
 - (b) Threat Modeling: Identify prospective risks and their modes of attack while taking into account variables like unauthorised access, manipulation of data, and service disruption.
 - (c) Impact Analysis: Identify any possible negative effects of a risk event, such as monetary losses, reputational harm, probable legal repercussions, or the interruption of vital services.

- (d) Probability Assessment: Calculate the probability that a risk event will occur using data from the past, expert opinion, or statistical analysis.
- (e) Risk Prioritisation: Give the risks with the greatest impact and likelihood the highest priority depending on their degree of impact and likelihood. This facilitates efficient resource allocation for risk reduction.

Conducting risk analysis during software testing helps identify potential areas where software faults could lead to significant issues in a product. Detecting problem areas early enables proactive problem-solving and reduces the overall risk of manufacturing-related problems. The purpose of risk analysis is to assess how the occurrence of risks might impact project outcomes and objectives. By identifying and assessing risks, appropriate mitigation techniques can be applied based on their qualitative and quantitative impact. The prioritization of risks is illustrated in Table 5.2.

Risk Name	Probability of occurrence	Priority
Data confidentiality/breach issues	High	1 (Highest)
Database connectivity failure	High	2
Improper integration of modules	High	3
Data hacking/malware	High	4
Constant change in requirements	Medium	5
Browser incompatibility/fatal bugs	Medium	6
Cascading delays in development	Medium	7
Development tool issues	Low	8
Asynchronous DOM loading	Low	9
Insufficient hard disk space	Low	10 (Lowest)

Table 5.2: Risk Analysis

5.2.3 Overview of Risk Mitigation, Monitoring, Management

1. Risk Mitigation:

- Identify and prioritize risks: Conduct a comprehensive risk analysis to identify potential risks and prioritize them based on their severity and likelihood.
- Create mitigating tactics: Make strategies and plans of action to reduce or get rid of the potential risks that have been identified. This could include setting in place security measures, creating redundancy systems, improving system monitoring, or performing routine backups.
- Implement security measures: To safeguard the system from unauthorised access, data breaches, and other security risks, implement the necessary security mea-

sures, such as firewalls, intrusion detection systems, access controls, encryption, and authentication mechanisms.

- Disaster recovery planning: To ensure that the system can recover from unexpected calamities and reduce delay, develop and implement disaster recovery and business continuity strategies.
- User education and information: Users of the system should receive complete instruction on security standards, data protection, and potential dangers. This reduces human-related risks like phishing scams and malicious information releases.

2. Risk Monitoring :

- Continuous monitoring: Implement a system monitoring tool that continuously monitors system activity, logs, and security incidents. This makes it possible to quickly identify any irregularities, potential dangers, or performance problems.
- Log analysis: Look for any unusual activity, security lapses, or patterns that can point to possible threats by analysing system logs and security event data.
- Intrusion detection and prevention: Implement intrusion detection and prevention systems (IDPS) to keep an eye on network activity, spot prospective attacks, and take preventative measures to reduce risks.
- Security incident response: To quickly address and mitigate security problems or breaches, establish a strong incident response mechanism. Along with establishing roles and duties, incident escalation protocols, and frequent incident exercises are all part of this.

3. Risk Management:

- Risk assessment reviews: Conduct regular assessments of the risk assessment to find new risks, evaluate current risks, and revise risk mitigation plans as necessary.
- Vendor management: If these system depends on outside vendors or service providers, set up efficient vendor management procedures to evaluate their security measures, keep track of their performance, and make sure they stick to the necessary requirements.
- Periodic audits and assessments: Perform regular audits and security assessments to review the efficacy of risk mitigation strategies and pinpoint areas for development.

5.3 Project Schedule

5.3.1 Project Task Set

The following is project task set :

1. Carrying out Literature Survey
2. Study of base Paper

3. Implementation of Project with base project functionalities and added on features
4. Continuous error discovery and debugging
5. Testing the system for various test cases
6. Documentation and report generation

5.3.2 Task Network

Task Network also called as an activity network, graphically represents the task flow followed for the development process. Figure 5.1 depicts the task network of our project.

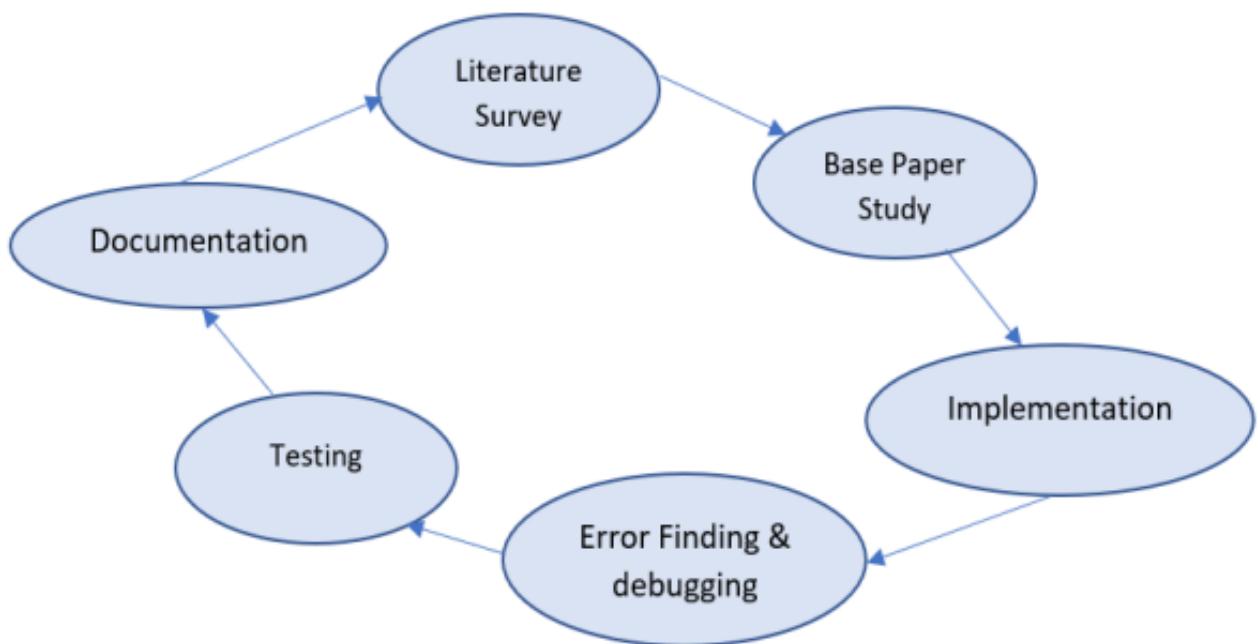


Figure 5.1: Task network

5.3.3 Timeline Chart

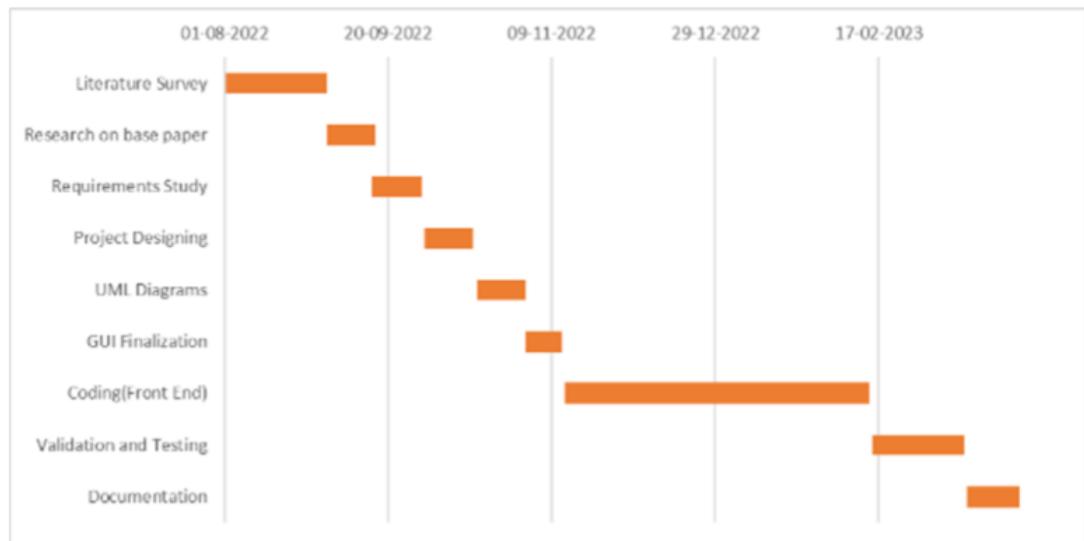


Figure 5.2: Timeline Chart

5.4 Team Organizations

The organisation of the team, its members, and each of their specific roles and responsibilities in the project's overall work are mostly covered in this chapter. Therefore, as we were planning our project, our primary attention was on creating the best project team through team-building activities. No matter the size, scope, or type of the project, there are two typical roles. the following roles:

- **Project Team Leader :** A project team leader is responsible for managing and guiding the group, ensuring their tasks are completed successfully. Their role includes coaching, leading, motivating, rewarding, and other actions aimed at encouraging and compelling team members to perform their assigned tasks.
- **Team Member :** A project team member actively works on assigned responsibilities and plays a direct and involved role in the project's development. They operate under the guidance and supervision of the team leader, contributing to the overall success of the project.

5.4.1 Management Reporting and Communication

As we gathered the information, we concentrated on our internal communications, which were by far easy to interact with. Each person shared their concerns, and together, they all worked to find solutions. We divided up the work equally among ourselves. The report we shared demonstrates our teamwork. We have good contact with Ms. M. B. Thombare, our guide. To demonstrate our project methodology, we provided timely reports. When unsure, we counsel them, and she always provided excellent guidance.

5.4.2 Team Structure

Following is the team structure as shown below in table 5.3:

Table 5.3: Team Structure

Name	Designation	Work done
Pooja Bodke	Team Leader	<ul style="list-style-type: none">• Requirement Analysis• PPT Presentation• Sequence diagram• Deployment diagram• Coding• Testing• Documentation• Report Generation
Rutu Patil	Member	<ul style="list-style-type: none">• Requirement Analysis• Design Analysis• PPT Presentation• Use case diagram• System Architecture diagram• Coding• Testing• Documentation• Report Generation

Table 5.3: Team Structure

Name	Designation	Work done
Sanskriti Chavanke	Member	<ul style="list-style-type: none">● Requirement Analysis● PPT Presentation● Class ,Object dia-gram● Activity diagram● DFD diagram● Coding● Testing● Documentation● Report Generation

Chapter 6

Project Implementation

6.1 Overview of Project modules

In our system there three main project modules they are:

- **Principle/ Head Of Department:** Since ERP implementation projects cause institutional changes, it requires the engagement of HOD to direct the changes. While the HOD may not participate in the project with hands on, they must approve the project, support the project and make sure every other stakeholder participates in the project fully.
- **Faculty:** Faculty is responsible for overall filling of data and is one of the important user of the website. As all the entries regarding to the curriculum will be filled by them.
- **Student:** Students are the most important stakeholders; quality of the academic faculty and study programs are the most important elements in ensuring quality of higher education and student are responsible for taking the usage of this system and website for their educational purpose.

6.2 Tools and Technologies Used

6.2.1 Tools

1. Sublime Text:

Sublime Text is a highly favored and feature-rich text editor extensively used by developers and programmers. It presents a sleek and minimalistic interface coupled with a wide array of customization options. Sublime Text operates seamlessly on multiple operating systems and offers essential functionalities like syntax highlighting, powerful search and replace capabilities, multiple selections, and an extensive plugin ecosystem that enhances coding experiences. Its exceptional speed and responsiveness make it

the top choice for professionals in need of an efficient text editor for coding and text editing tasks.

2. Xampp Server :

XAMPP is a well-known open-source software package designed for local development settings, providing a comprehensive web server solution. The acronym represents its key components: Cross-platform, Apache, MySQL, PHP, and Perl. Users can set up a local server environment on their computers using XAMPP, enabling them to create and test web applications without an internet connection. XAMPP offers a stable framework for developing dynamic websites and web applications, utilizing Apache as the web server, MySQL as the database management system, and PHP and Perl as the programming languages. Additional tools and modules, such as FileZilla for FTP file transfers and phpMyAdmin for database management, are included. XAMPP's user-friendly installation and configuration process make it a popular choice among developers and students seeking a convenient local server solution.

6.2.2 Technologies

- For Frontend:

1. HTML:

Because HTML is the industry-standard markup language for structuring and displaying content on the web, it is utilized in the creation of websites. HTML offers a clear and well-organized structure for website content. Both developers and consumers will find it simple to comprehend and browse because of the use of tags to markup material and determine its structure. All current web browsers support HTML, making it a dependable and consistent method for developing web pages that function on a variety of platforms and gadgets. HTML enables programmers to construct web pages that are user-friendly for those with disabilities. Developers can give screen readers and other assistive technology a structure that is more meaningful and understandable by employing semantic HTML elements.

2. CSS:

The usage of CSS (Cascading Style Sheets) in website building allows for the separation of content's display from its structure and functionality. The following are some justifications for using CSS while creating websites:

- (a) Styles: CSS enables designers to add aesthetic elements to website content, such as font, color, and layout. Developers may design aesthetically appealing websites that are simpler to read and navigate by separating appearance from structure.
- (b) Consistency: CSS makes it simple to keep uniform styling throughout a website. Web designers can produce a more unified and streamlined website by generating reusable styles and using them consistently.
- (c) Efficiency: The amount of code required to style a website is reduced with CSS. Developers can write shorter code by applying CSS to numerous components at

once.

3. JavaScript:

Because it enables the creation of dynamic, interactive web pages, JavaScript is utilized in the building of websites. The following are some justifications for using JavaScript in website development: Interactive elements can be created using JavaScript, including pop-up menus, drop-down menus, and animations. JavaScript allows programmers to make fun, interactive experiences for website visitors. JavaScript can be used to construct responsive websites that change their layout in response to user input and activity. JavaScript, for instance, can be used to dynamically load material without requiring a page refresh.

- (a) Functionality: JavaScript enables programmers to increase a website's functionality. JavaScript, for instance, can be used to interface with APIs, conduct calculations, and check user input. JavaScript is a dependable scripting language because it is supported by all current web browsers.
- (b) Flexibility: To build sophisticated and potent websites, JavaScript can be combined with other web technologies like HTML and CSS. Using JavaScript in conjunction with other programmes, programmers may build extremely interactive and functional websites.

- **For Backend:**

1. PHP:

PHP is utilized in website development due to its ability to create dynamic and interactive websites that can communicate with databases, handle form data, and perform server-side operations. It is a server-side scripting language, enabling the creation of websites with dynamic content, database integration, and functionality such as social networks and e-commerce sites. PHP offers flexibility to build simple scripts or complex websites and enjoys widespread compatibility with web hosting companies and major web servers. Its large and active developer community provides abundant resources and libraries, ensuring continuous development and improvement with frequent updates and additions.

Chapter 7

Software Testing

7.1 Type of Testing

1. **Functionality Testing :** Functional testing is an essential component of web development that focuses on confirming that a web application functions as intended in accordance with the requirements set out for it. It involves testing each of the application's features and functionalities to make sure they function as planned. Aspects of the programme such as user actions, input forms, navigation, links, buttons, and overall application behaviour are all covered by the test cases that are created by testers. Functional testing involves simulating user inputs and interactions to check the application's response. They examine whether the programme operates properly and generates the desired results. The objective is to guarantee that the programme accurately completes its intended tasks and that all functional requirements are met. The many pages, modules, and components of the web application are all subjected to functional testing. To ensure smooth integration and compatibility, testers verify the functionality of individual elements as well as the interactions between different features.
2. **Usability Testing:** Usability testing mainly focuses on evaluating the user experience and ease of use of a web application. It entails testing the user interface (UI), user flow, navigation, and general user friendliness of the application. Understanding how users interact with the system, identifying any problems or obstacles that can limit its usefulness, and gathering input for improvement are the goals. Individuals are given particular tasks to complete inside the web application during usability testing. These exercises cover a range of application functionalities and features while modelling real-world circumstances. Users' interactions are observed and recorded by testers, who make note of any challenges or confusion they have along the way.
3. **Performance Testing:** Performance testing focuses on analysing a web application's performance, responsiveness, scalability, and stability under various load scenarios. It entails calculating and examining the application's performance metrics, including

response times, server performance, and database performance. Performance testing helps in finding bottlenecks, resource limitations, and other problems that may affect the project's performance and user experience by using real-world scenarios and stress testing the application. Performance testing involves loading the web application with different approaches and tools to analyse how it responds to high usage. This entails simulating numerous users operating simultaneously, raising the volume of queries, and assessing how the application responds to peak traffic.

4. **Interface Testing:** The main goal of interface testing is to assess how users interact with the user interface (UI) of a web application. In order to create an easy and simple user experience, it requires testing the UI's visual components, functionality, and usability. The goal of interface testing is to ensure that the web application's interface is clear to use, responsive, and visually appealing. Testers evaluate the layout, typography, colours, images, buttons, forms, menus, and links of the UI while doing interface testing. They confirm the navigation is clear, the text is readable, the photos are presented appropriately, and the UI elements are aligned correctly. Interface testing assesses the functionality of UI elements in addition to their visual characteristics.
5. **Security Testing:** The main goal of security testing is to find weaknesses and flaws in the security protocols used by the web application. Its main objective is to guarantee that the application is sufficiently safeguarded from any risks or unauthorised access. Various procedures and techniques are used during security testing to evaluate an application's resistance to potential threats. Another important aspect of security testing is vulnerability assessment. This involves examining the application with automated tools for known errors, configuration errors, or insufficient security measures. Authentication and authorization testing are also included in security testing. This demonstrates the security and proper implementation of the authentication techniques, including usernames, passwords, and multi-factor authentication. In order to prevent unauthorised individuals from accessing sensitive information or carrying out restricted actions, authorization testing makes sure that access restrictions and permissions are correctly applied.
6. **Compatibility testing:** Compatibility testing ensures the proper functioning and appearance of a web application across different platforms, devices, and browsers. It entails evaluating the web application's compatibility across a range of operating systems, web browsers, screen sizes, and resolutions. Regardless of the user's preferred platform or device, the aim is to confirm that the programme performs consistently and provides a seamless user experience. Testers check how the online application renders and works on various browsers, including Chrome, Firefox, Safari, Internet Explorer/Edge, and others, during compatibility testing. They make sure that the layout, content, navigation, and interactive components of the application are shown accurately and consistently across these browsers. Any browser-specific problems, such as inconsistent rendering, broken layouts, out-of-place elements, or functional inconsistencies, can be found through compatibility testing.

7.2 Test Cases and Test Result

Table 7.1: Test cases and Test Result

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
TC_1	Faculty functions	Login to Profile	Registerd ID and password	All functionality of faculty will be visible like different forms to fill and view,etc	All neces-sory func-tions are visilble	Pass
$TC_{1.1}$	Faculty dashboard	Locate dashboard	Click on different menu options there on dash-board	Respected pages should be displayed	Respected pages are displayed	Pass
$TC_{1.2}$	Add student	Click on 'Add student' menu on dash-board	Enter details of student and click on submit button	Details of student must be added to database	Student details are added successfully to database	Pass
$TC_{1.3}$	View Student	Click on 'View Student' menu in dash-board	NA	Details of particular student must be fetched and displayed	Details of student fetched and displayed succesfully	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
$TC_{1.4}$	Add mentee	Click on 'Add mentee' menu on dashboard	Enter details of mentee and click on submit button	Details of mentee must be added to database	Student details are added successfully to database	Pass
$TC_{1.5}$	View mentee	Click on 'View mentee' menu in dashboard	NA	Details of particular mentee must be fetched and displayed	Details of mentee fetched and displayed successfully	Pass
$TC_{1.6}$	View Attendance	Click on 'View Attendance' menu in dashboard	NA	Details of particular mentee Attendance must be fetched and displayed	Attendance of mentee is fetched and displayed successfully	Pass
$TC_{1.7}$	View Activities	Click on 'View Activities' menu in dashboard	NA	Details of particular mentee's activities must be fetched and displayed	Details of mentee's activities are fetched and displayed successfully	Pass
$TC_{1.8}$	View Achievements	Click on 'View Achievements' menu in dashboard. Select Co-curricular or Extra-curricular and click on submit button	NA	Details of particular mentee's achievements must be fetched and displayed	Details of mentee's achievements are fetched and displayed successfully	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
$TC_{1.9}$	View Phases	Click on 'View Phases' menu in dashboard.	NA	Filled answers of questions must be fetched and displayed	Answers of given questions are fetched and displayed successfully	Pass
TC_2	Student functions	Login to profile	Given Id and password	Functions of student like personal details, attendance, activities and achievements	All the functions of the student are visible	Pass
$TC_{2.1}$	Student dashboard	Locate dashboard	Click on different menu options there on dashboard	Respected pages and personal details should be displayed	Respected pages and details are displayed	Pass
$TC_{2.2}$	Add Activities	Click on 'Add Activities' menu on dashboard	Enter details of activity and click on submit button	Details of activity must be added to database	Student details of activity is added successfully to database	Pass
$TC_{2.3}$	View Activities	Click on 'View Activities' menu in dashboard	NA	Details of activity must be fetched and displayed	Details of activity fetched and displayed successfully	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
$TC_{2.4}$	Add Achievements	Click on 'Add Achievements' menu on dashboard	Select Co-curricular or Extra-curricular achievements and Enter details of achievements and click on submit button	Details of achievements must be added to database	Student details of achievements is added successfully to database	Pass
$TC_{2.5}$	View Achievements	Click on 'View Achievements' menu in dashboard	NA	Details of achievements must be fetched and displayed	Details of achievements fetched and displayed successfully	Pass
$TC_{2.6}$	Add Attendance	Click on 'Add Attendance' menu on dashboard	Select batch and enter attendance year and semester wise and click on submit button	Entered attendance must be added to database	Student's attendance is added successfully to database	Pass
$TC_{2.7}$	View Attendance	Click on 'View Attendance' menu in dashboard	NA	Details of attendance must be fetched and displayed	Attendance is fetched and displayed successfully	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
$TC_{2.8}$	Phases	Click on 'Phases' menu on dashboard	Select year and phase number. Answer each question present in phase. click on submit button	Answerd questions must be added to database	Filled answers is added successfully to database	Pass
$TC_{2.9}$	View Phases	Click on 'Phases' menu on dashboard	Fill all the answers to question	All answers to ques-tions are answerd	Answers are fetched and dis-played suc-cessfully from the database	Pass
TC_3	Super Admin functions	Login to profile	Registered Id and password	functions of super admin should be visi-ble such as dashboard, different forms to fill, reports to generate, etc	All the functions of the su-per admin are visible	Pass
$TC_{3.1}$	Super Admin dashboard	Locate dashboard	Click on different menu avail-able on dashboard	Respected pages should be displayed	Respected pages are displayed	Pass
$TC_{3.2}$	Add SuperAdmin	Click on 'Add SuperAdmin' menu on dashboard	Provide superad-min details and click on submit button	Details of the super admin is added to database	Details added success-fully in the database	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
$TC_{3.3}$	View superadmin	Click on 'View Superadmin' menu on dashboard	NA	Details of the all superadmin is displayed	Details fetched and displayed successfully from the database	Pass
$TC_{3.4}$	Add faculty	Click on 'Add faculty' menu on dashboard	Provide faculty details and click on submit button	Details of the faculty is added to database	Details added successfully in the database	Pass
$TC_{3.5}$	View faculty	Click on 'View faculty' menu on dashboard	NA	Details of the all faculty is displayed	Details fetched and displayed successfully from the database	Pass
$TC_{3.6}$	Add student	Click on 'Add Student' menu on dashboard	Enter details of student and click on submit button	Details of the student is added to database	Details added successfully in the database	Pass
$TC_{3.7}$	View student	Click on 'View Student' menu on dashboard	NA	Details of the all student is displayed	Details fetched and displayed successfully from the database	Pass
$TC_{3.8}$	Add Subject	Click on 'Add subject' menu on dashboard	Provide subject details and click on submit button	Details of subject is added to database	Details added successfully in the database	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
$TC_{3.9}$	View Subject	CLick on 'View subject' menu on dashboard	NA	Details of all subjects is displayed	Entry fetched displayed successfully from the database	Pass
$TC_{3.10}$	Verify subject allocation	Login to faculty dashboard who has been allocated new subject	NA	Faculty has access to subject details	Faculty gains access to respective subject details	Pass
$TC_{3.11}$	Add Faculty Education and Work	Click on 'Add faculty education and Work' menu on dashboard	Provide Faculty Education and Work details and click on submit button	Faculty Education and Work are added to database	Details added successfully in the database	Pass
$TC_{3.12}$	View Faculty Education and Work	Click on 'View Faculty Education and Work'	NA	Faculty Education and Work is displayed	Details fetched and displayed successfully from the database	Pass
$TC_{3.13}$	Add Faculty Research	Click on 'Faculty Research' menu on dashboard	Provide Faculty Research details and click on submit button	Faculty Research added to database	Details added successfully in the database	Pass
$TC_{3.14}$	View Faculty Research	Click on 'Faculty Research' menu on dashboard	NA	Faculty Research is displayed	Details fetched and displayed successfully from the database	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status	
	$TC_{3.15}$	Add Faculty Training	Click on 'Faculty Training' menu on dashboard	Provide Faculty Training details and click on submit button	Faculty Training added to database	Details added successfully in the database	Pass
	$TC_{3.16}$	View Faculty Training	Click on 'Faculty Training' menu on dashboard	NA	Faculty Training is displayed	Details fetched and displayed successfully from the database	Pass
	$TC_{3.17}$	Faculty Attended	Click on 'Faculty Attended' menu on dashboard	Provide Faculty Attended details and click on submit button	Faculty Attended added to database	Details added successfully in the database	Pass
	$TC_{3.18}$	View Faculty Attended	Click on 'Faculty Attended' menu on dashboard	NA	Faculty Attended is displayed	Details fetched and displayed successfully from the database	Pass
	$TC_{3.19}$	Add Faculty Education	Click on 'Faculty Education' menu on dashboard	Provide Faculty Education details and click on submit button	Faculty Education added to database	Details added successfully in the database	Pass
	$TC_{3.20}$	View Faculty Education	Click on 'Faculty Education' menu on dashboard	NA	Faculty Education is displayed	Details fetched and displayed successfully from the database	Pass

Sr. no	Test Case Objectives	Steps	Input	Expected Results	Actual Result	Status
$TC_{3.21}$	Add Faculty Interaction	Click on 'Faculty Interaction' menu on dashboard	Provide Faculty Interaction details and click on submit button	Faculty Interaction added to database	Details added successfully in the database	Pass
$TC_{3.22}$	View Faculty Interaction	Click on 'Faculty Interaction' menu on dashboard	NA	Faculty Interaction is displayed	Details fetched and displayed successfully from the database	Pass
$TC_{3.23}$	Add Faculty Guest Lecture	Click on 'Faculty Guest Lecture' menu on dashboard	Provide Faculty Guest Lecture details and click on submit button	Faculty Guest Lecture added to database	Details added successfully in the database	Pass
$TC_{3.24}$	View Faculty Guest Lecture	Click on 'Faculty Guest Lecture' menu on dashboard	NA	Faculty Guest Lecture is displayed	Details fetched and displayed successfully from the database	Pass
$TC_{3.25}$	Add Faculty SPPU Info	Click on 'Faculty SPPU Info' menu on dashboard	Provide Faculty SPPU Info details and click on submit button	Faculty SPPU Info added to database	Details added successfully in the database	Pass
$TC_{3.26}$	View Faculty SPPU Info	Click on 'Faculty SPPU Info' menu on dashboard	NA	Faculty SPPU Info is displayed	Details fetched and displayed successfully from the database	Pass

Chapter 8

Result

8.1 Outcomes

- A unified web site that serves as a one-stop for all the information pertaining to the accreditation process should be created as a result of the project. Information on the accreditation standards, procedures, guidelines, and other pertinent data should be accessible through the site.
- Academic support to all the students throughout the degree program.
- Details of the student should be made available and should be easily accessed by the staff.
- By automating administrative activities, reducing paperwork, and offering real-time updates on the certification process, the project should seek to boost efficiency and productivity.
- An improved data management system, capable of handling substantial amounts of data linked to the accreditation process, including institution profiles, accreditation criteria, and evaluation reports, should be the project's output.

8.2 Screenshots

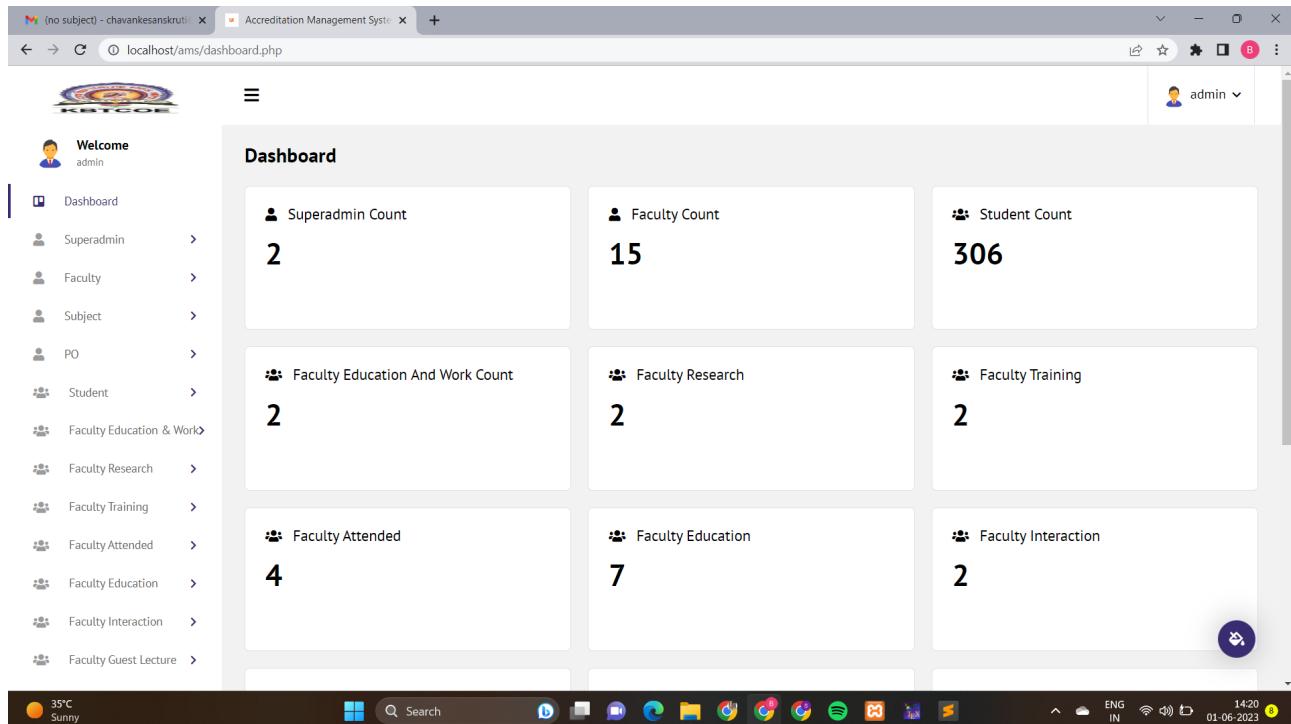


Figure 8.1: Super Admin Dashboard

Chapter: 8

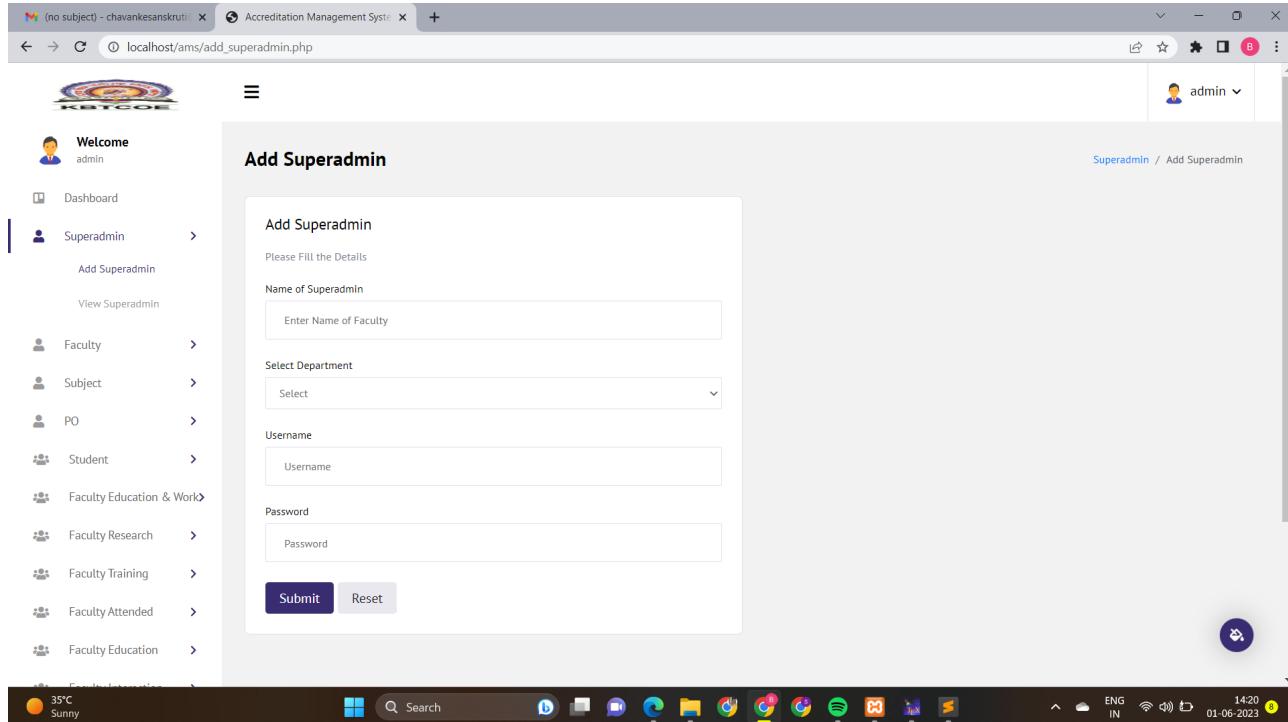


Figure 8.2: Add Superadmin

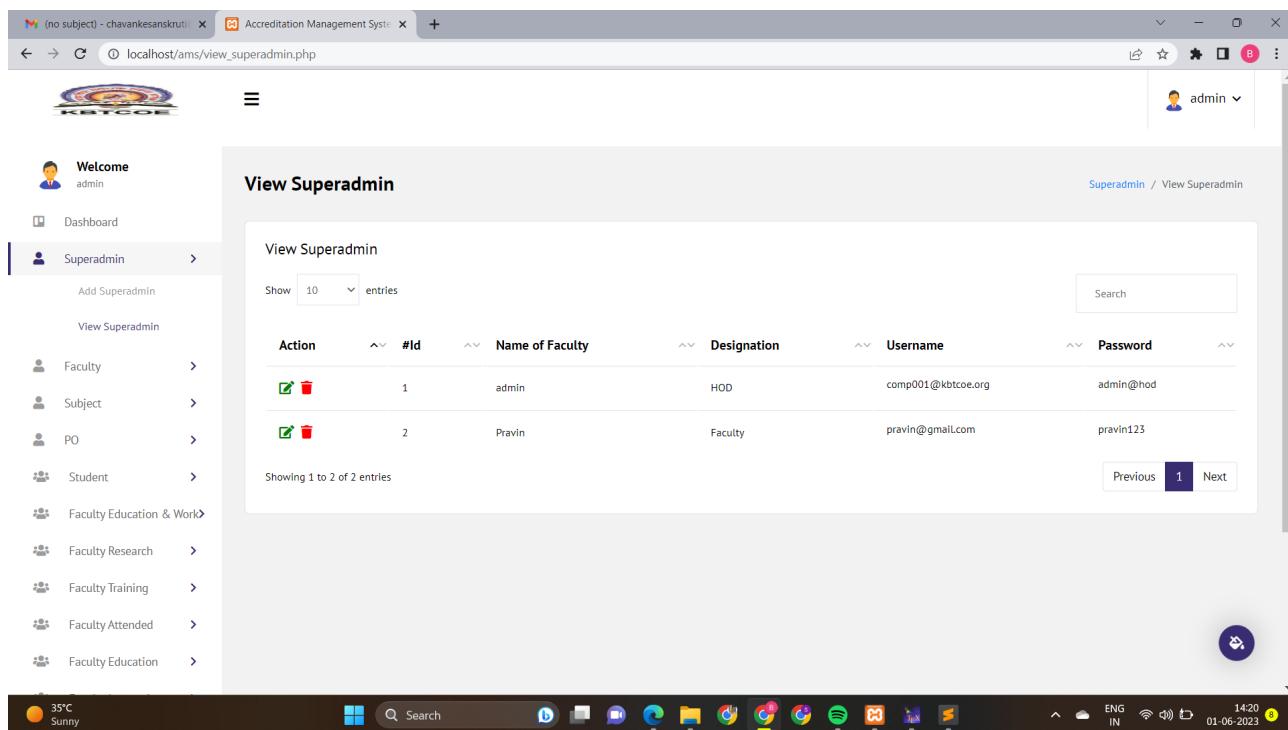


Figure 8.3: View Superadmin

Chapter: 8

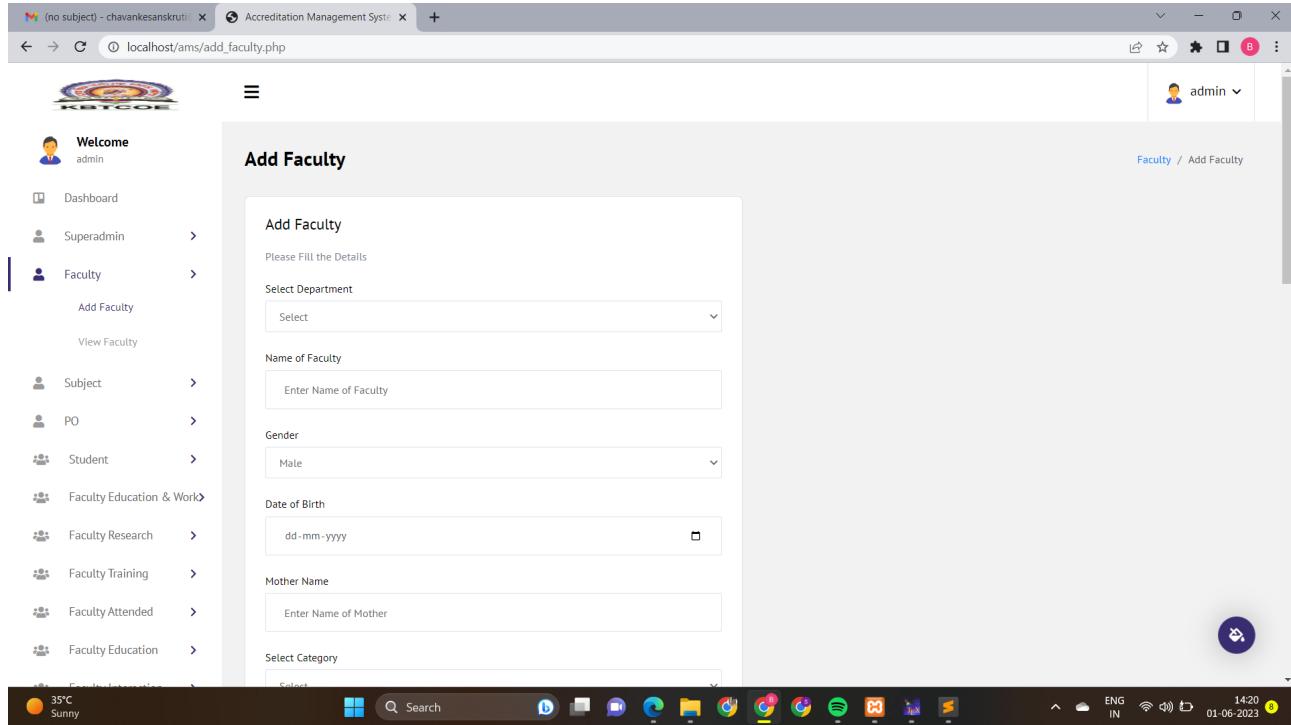


Figure 8.4: Add faculty-1

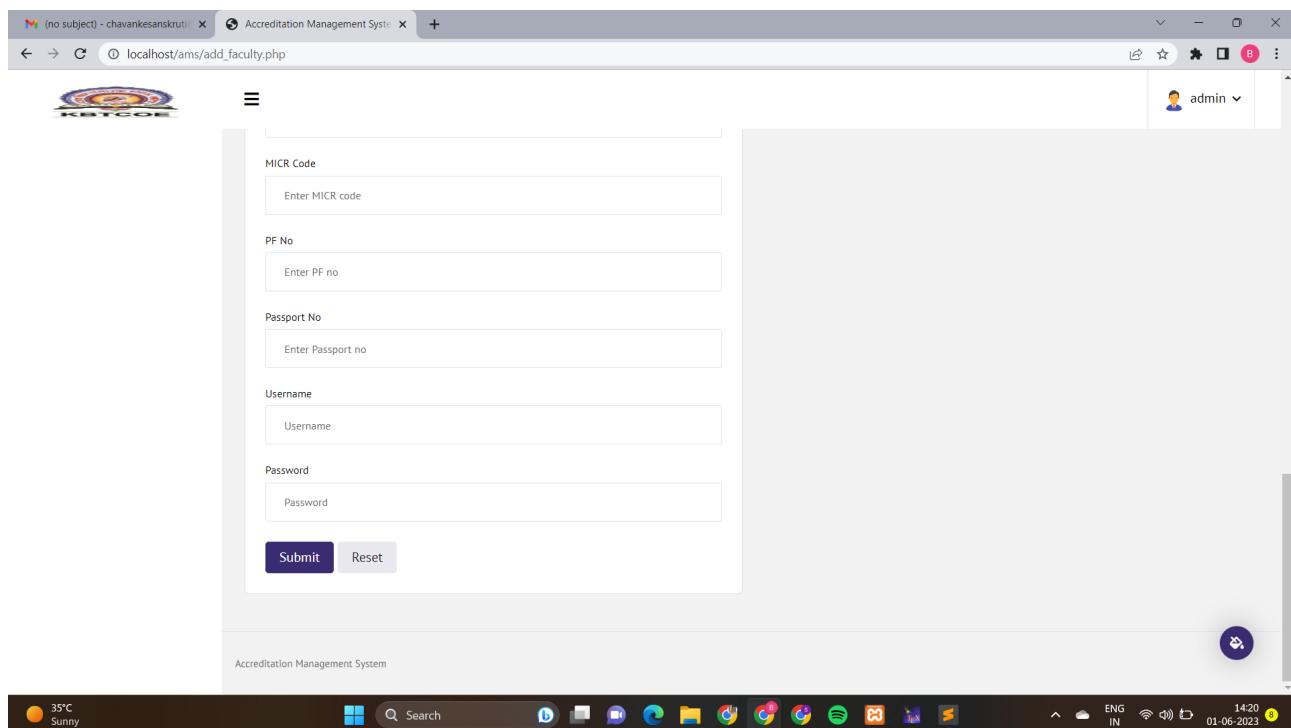


Figure 8.5: Add faculty-2

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The screenshot shows a web application titled "Accreditation Management System" on a Windows desktop. The left sidebar menu includes "Dashboard", "Superadmin", "Faculty" (selected), "Add Faculty", "View Faculty", "Subject" (selected), "PO", "Student", "Faculty Education & Work", "Faculty Research", "Faculty Training", "Faculty Attended", and "Faculty Education". The main content area is titled "View Faculty" and displays a table of faculty members. The table columns are: Action, #Id, Department, Name of Faculty, Gender, Date of Birth, Mother's Name, Category, Religion, Mobile no, and Email Address. The table contains 6 rows of data.

Action	#Id	Department	Name of Faculty	Gender	Date of Birth	Mother's Name	Category	Religion	Mobile no	Email Address
[Edit, Delete]	1	computer	Dr. Medhane Darshan Vishwasrao	Male	NA	NA	NA	NA	8888832400	medhane.darshan@kbtcoe.c
[Edit, Delete]	2	computer	Dr. Tarle Balasaheb Sukadeo	Male					7588097627	tarle.balasaheb@kbtcoe.org
[Edit, Delete]	3	computer	Dr. Tidake Vaishali Santosh	Female					9422751559	tidake.vaishali@kbtcoe.org
[Edit, Delete]	4	computer	Dr. Talekar Sopan Ashok	Male	1977-02-02	na	na	na	9834326156	talekar.sopan@kbtcoe.org
[Edit, Delete]	5	computer	Shinde Pushkar Pratap	Male					9422777418	shinde.pushkar@kbtcoe.c
[Edit, Delete]	6	computer	Shevale Rupali	Female					9021001706	shevale.rupali@kbtcoe.org

Figure 8.6: View faculty

The screenshot shows the "Add Subject" page of the "Accreditation Management System". The left sidebar menu is identical to Figure 8.6. The main content area is titled "Add Subject" and contains several input fields: "Year of Study" (dropdown menu "Select"), "Pattern" (dropdown menu "Select"), "Department" (dropdown menu "Select"), "Select Semester" (dropdown menu "Select"), "Course Code[Subject Code]" (text input field "Enter the Course Code"), and "Course Name[Subject Name]" (text input field "Enter the Course Name").

Figure 8.7: Add subject-1

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The screenshot shows a web browser window titled 'Accreditation Management System' at the URL 'localhost/ams/add_subject.php'. The page contains several input fields for entering subject details:

- Enter the Ura/Pre Marks
- Enter the Total Marks
- Teaching Scheme(Hours/weeks)
 - Enter the Lecture Credit
 - Enter the Practical Credit
 - Enter the Tutorial Credit
 - Enter the Total Credit
- Name of Faculty
 - Select
- Faculty Username
 - Select
- Submit
- Reset

The browser's status bar at the bottom shows the date as '01-06-2023' and the time as '14:23'.

Figure 8.8: Add subject-2

The screenshot shows a web browser window titled 'Accreditation Management System' at the URL 'localhost/ams/view_subject.php'. The page displays a list of subjects in a table format:

Action	#Id	Year	Pattern	Department	Semester No	Course Code	Course Name	Lecture Hour	Practical Hour	Tutorial Hour	Midesem Marks
[Edit/Delete]	1	BE	2019	Computer	I	410241	Design and Analysis of Algorithm	3	0	0	30
[Edit/Delete]	2	BE	2019	Computer	II	410242	Machine Learning	3	0	0	30
[Edit/Delete]	3	BE	2019	Computer	I	410243	Blockchain Technology	3	0	0	30
[Edit/Delete]	4	BE	2019	computer	I	410244	Artificial Intelligence	5	0	0	30
[Edit/Delete]	5	SE	2019	computer	I	210241	Discrete Mathematics	3	-	-	30
[Edit/Delete]	6	SE	2019	Computer	I	210242	Fundamentals of Data structure	03	-	-	30

The browser's status bar at the bottom shows the date as '01-06-2023' and the time as '14:23'.

Figure 8.9: View subject

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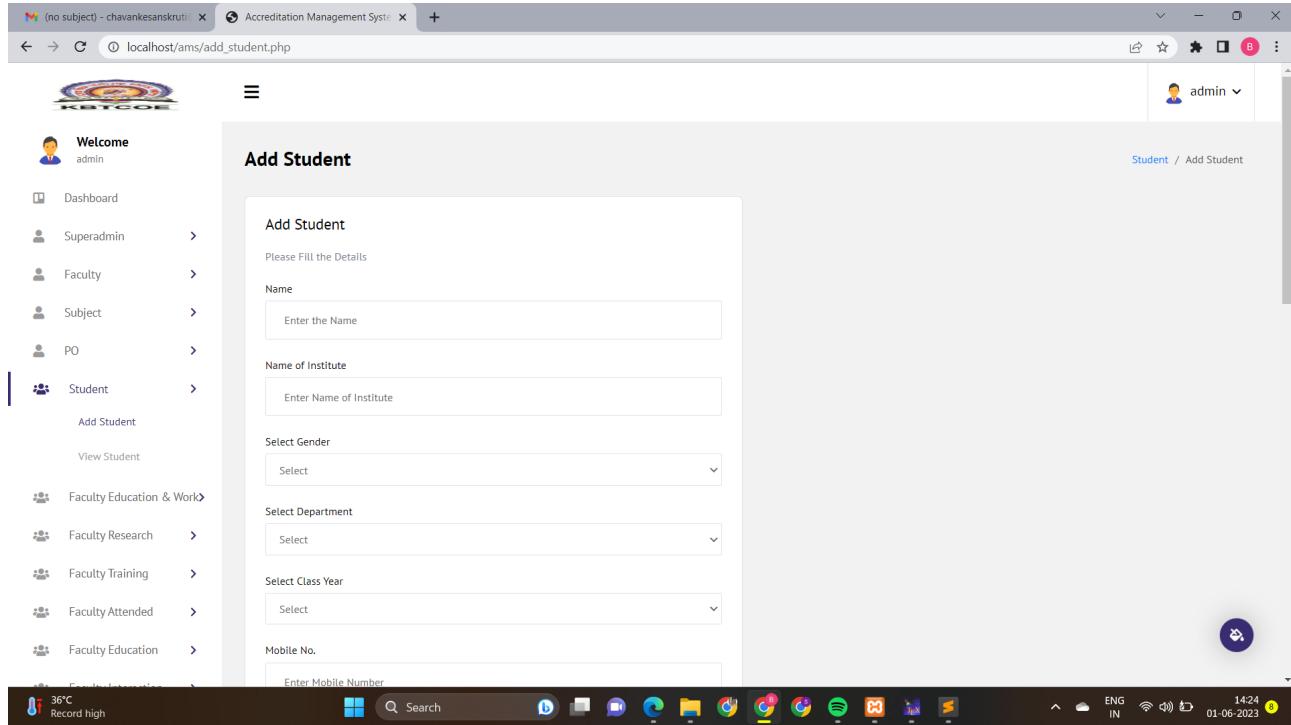


Figure 8.10: Add student-1

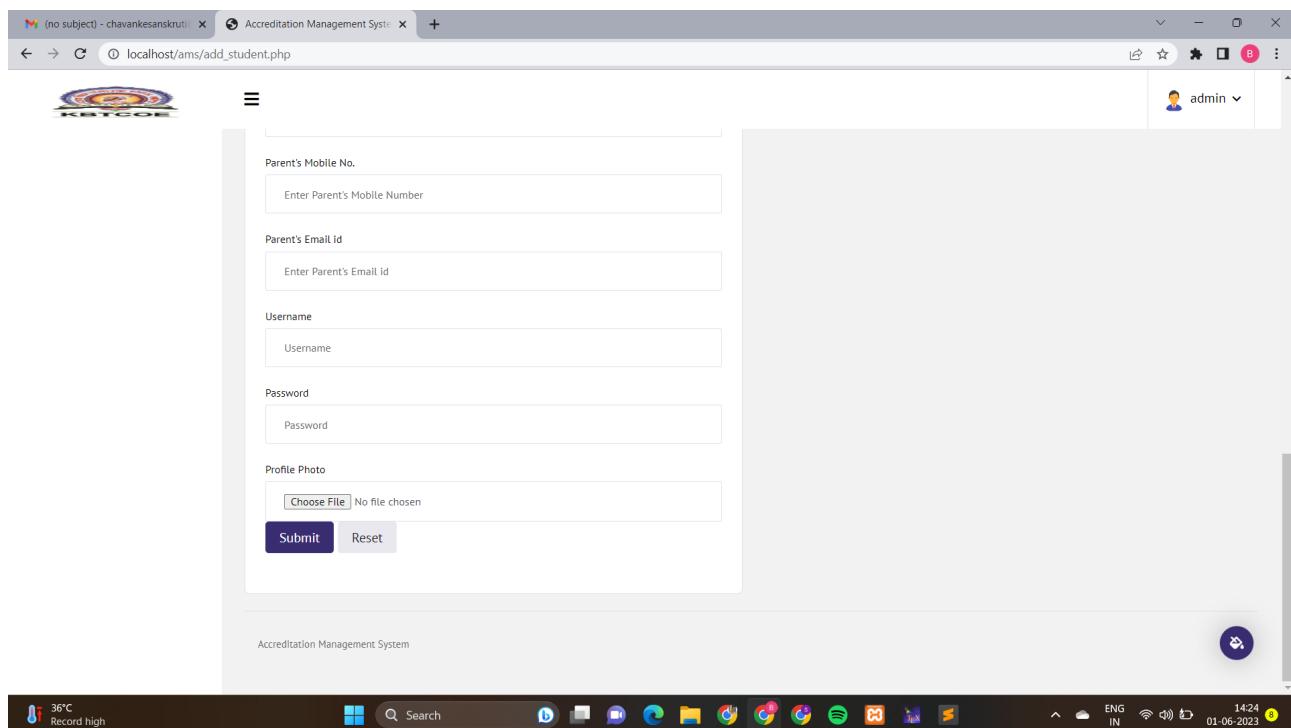


Figure 8.11: Add student-2

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The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/ams/view_student.php". The page has a left sidebar with a navigation menu. The main content area is titled "View Student" and displays a table of student records. The table columns include Action, #Id, Name, Name of Institute, Branch, Class Year, Mobile Number, Email, Blood group, Address, and City. The data in the table is as follows:

Action	#Id	Name	Name of Institute	Branch	Class Year	Mobile Number	Email	Blood group	Address	City
	1	Aher Prathamesh Shankar	MVP's KBTCOE	computer	BE					
	2	Ahire Pranav Dinesh	MVP's KBTCOE	computer	BE					
	3	Ahire Sakshi Sunil	MVP's KBTCOE	computer	BE					
	4	Andhare Akshay Anil	MVP's KBTCOE	computer	BE					
	5	Atre Piyush Manojkumar	MVP's KBTCOE	computer	BE					
	6	Baviskar Himaanshu	MVP's	computer	BE					

Figure 8.12: View student

The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/ams/add_edu_faculty.php". The page has a left sidebar with a navigation menu. The main content area is titled "Add Faculty Education and Work" and contains several input fields for adding education and work details. The fields include:

- Select Department (dropdown menu: Select)
- Name of Faculty (dropdown menu: Select)
- UG Degree (text input: Enter UG Degree)
- UG Specialization (text input: Enter UG Specialization)
- UG University (text input: Enter UG University)
- UG Marks(Percentage_or_CGPA) (text input: Enter UG Marks)

Figure 8.13: Add faculty education and work

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Action	#Id	Department	Name of Faculty	UG Degree	UG Specialization	UG University	UG Marks (Percentage or CGPA)	UG Class	UG Passing Month & Year	PG Degri
<input checked="" type="checkbox"/> Delete	1	abc	abc	abc	abc	abc	abc	abc	2022-12	abc
<input checked="" type="checkbox"/> Delete	2	Computer	Rutu	a	a	a	1	a	2023-02	aa

Figure 8.14: View faculty education and work

Figure 8.15: Add faculty research

Chapter: 8

The screenshot shows a web browser window titled "Accreditation Management System" at the URL "localhost/ams/view_research.php". The page is titled "View Research" and displays a table of research projects. The table has columns for Action, #Id, Department, Name of Faculty, Role, Sanctioned Amount, Received Amount, Utilized Amount, Sponsoring Agency, Sponsoring Agency2, and Title of Research Project. Two entries are listed:

Action	#Id	Department	Name of Faculty	Role	Sanctioned Amount	Received Amount	Utilized Amount	Sponsoring Agency	Sponsoring Agency2	Title of Research Project
<input checked="" type="checkbox"/> <input type="button" value="Delete"/>	2	Computer	Atharva	Prof	5000	5000	3500	NA	NA	NA
<input checked="" type="checkbox"/> <input type="button" value="Delete"/>	3	Computer	Diksha	q	q	q	q	q	q	q

The sidebar on the left includes links for Dashboard, Superadmin, Faculty, Subject, PO, Student, Faculty Education & Work, Faculty Research (selected), Faculty Training, Faculty Attended, and Faculty Education. The bottom status bar shows the date as 01-06-2023 and the time as 14:25.

Figure 8.16: View faculty research

The screenshot shows a web browser window titled "Accreditation Management System" at the URL "localhost/ams/add_facultytraining.php". The page is titled "Add Organized Faculty" and contains a form for adding faculty details. The form fields include:

- Please Fill the Details
- Select Department (dropdown menu)
- Name of Faculty/Coordinator (text input)
- Enter Type of programme (text input)
- Enter Type Of programme(Specify,if any other) (text input)
- Approving Authority(if any) (text input)
- Sponsoring Authority(if any) (text input)

The sidebar on the left includes links for Dashboard, Superadmin, Faculty, Subject, PO, Student, Faculty Education & Work, Faculty Research, Faculty Training (selected), Add Faculty Training, View Faculty Training, Faculty Attended, and Faculty Education. The bottom status bar shows the date as 01-06-2023 and the time as 14:25.

Figure 8.17: Add organized faculty

Chapter: 8

The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/ams/view_facultytraining.php". The page has a left sidebar with a navigation menu. The main content area is titled "View Faculty" and displays a table of faculty information. The table columns include Action, #Id, Department, Name of Faculty, Type, Other Type, Approving Authority, Sponsoring Authority, Funds Received, Funds utilized, Title of programme, and Dur.

Action	#Id	Department	Name of Faculty	Type	Other Type	Approving Authority	Sponsoring Authority	Funds Received	Funds utilized	Title of programme	Dur.
<input checked="" type="checkbox"/> <input type="button" value="Delete"/>	2	Computer	Tina Wankhede	Seminar	NAN	NBA	Infosys	3000	1700	Self confidence	1 mc
<input checked="" type="checkbox"/> <input type="button" value="Delete"/>	3	Computer	Pooja Bodke	Seminar	NAN	NA	NA	NA	NA	NA	NA

Showing 1 to 2 of 2 entries

Figure 8.18: View organized faculty

The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/ams/add_faculty_attended.php". The page has a left sidebar with a navigation menu. The main content area is titled "Add Faculty" and contains a form titled "Add Faculty_Attended". The form fields include "Select Department" (dropdown), "Name of Faculty" (dropdown), "Type Of Programme" (dropdown), "Title Of Programme" (text input), "Organizer Name" (text input), and "Name of Approving" (text input).

Figure 8.19: Add faculty attended

Chapter: 8

Action	#Id	Department	Name of Faculty	Type Of Programme	Title Of Programme	Organizer Name	Name of Approving	Date From	Date To	Duration	Au Ye
<input checked="" type="checkbox"/> Delete	2	NA	Na	NA	NA	NA	Na	2020-02-20	2020-02-25	NA	NA
<input checked="" type="checkbox"/> Delete	3	Information Technology	Diksha	abc	aa	aaa	aer	2023-02-02	2023-02-05	1	20
<input checked="" type="checkbox"/> Delete	4	Computer	Rutu	abc	aa	aaa	aer	2023-02-12	2023-01-29	1	20
<input checked="" type="checkbox"/> Delete	5	Computer	Atharva	NA	NA	NA	Na	2020-02-02	2020-02-25	21	20

Figure 8.20: View faculty attended

Figure 8.21: Add faculty education

Chapter: 8

Action	#Id	Department	Name of Faculty	UG Degree	UG Specialization	UG University	UG Percentage	UG CI	UG Month and Year of Passing	PG Degree	PG Spe
<input checked="" type="checkbox"/> Delete	3	aa	rutu patil	ff	gg	hh	jj	kk	2022-12-04	qq	ww
<input checked="" type="checkbox"/> Delete	4	aa	rutu patil	ff	gg	hh	jj	kk	2022-12-14	qq	ww
<input checked="" type="checkbox"/> Delete	5	aa	rutu patil	ff	gg	hh	jj	kk	2022-12-14	Qu	fhjt
<input checked="" type="checkbox"/> Delete	6	Information Technology		B	C	S	89	CD	2023-01	DFX	XDG
<input checked="" type="checkbox"/> Delete	7	Information Technology		B	C	S	89	CD	2023-01	DFX	
<input checked="" type="checkbox"/> Delete	8	Computer	Rutu	be	aa	a	89	CD	2023-01	DFX	XDG

Figure 8.22: View faculty education

Figure 8.23: Add faculty interaction

Chapter: 8

The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/ams/view_faculty_interaction.php". The page is titled "View Faculty" and displays a table of faculty information. The table columns include Action, #Id, Department, Faculty Name, Role, Particulars, Vnue, Programme Date, Academic Year, Target Audience, Target Audience [Research Scholars], and Tar Aut [Fa]. There are two entries in the table:

Action	#Id	Department	Faculty Name	Role	Particulars	Vnue	Programme Date	Academic Year	Target Audience	Target Audience [Research Scholars]	Tar Aut [Fa]
	3	comp	Sanskriti	prof	abcc	xys	2022-12-14	2023	85	95	35
	4	IT	tina	non teaching	abc	pune	2022-12-08	2023	80	85	25

Below the table, it says "Showing 1 to 2 of 2 entries". The left sidebar shows navigation links like Dashboard, Superadmin, Faculty, Subject, PO, Student, Faculty Education & Work, Faculty Research, Faculty Training, Faculty Attended, Faculty Education, and Faculty Interaction. The bottom status bar shows the date as 01-06-2023 and the time as 14:27.

Figure 8.24: View faculty interaction

The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/ams/add_guest_lecture.php". The page is titled "Add Guest Lecture" and contains a form for adding guest lecture details. The form fields include:

- Add Guest
- Please Fill the Details
- Select Department (dropdown menu: Select)
- Name of Faculty (dropdown menu: Select)
- Topic or Subject (text input: Enter Topic or Subject)
- Name of Resource Person (text input: Enter Name of Resource Person)
- Designation of Resource Person (text input: Enter Designation of Resource Person)
- Resource Person Organization (text input: Enter Resource Person Organization)

The left sidebar shows navigation links like Dashboard, Superadmin, Faculty, Subject, PO, Student, Faculty Education & Work, Faculty Research, Faculty Training, Faculty Attended, Faculty Education, Faculty Interaction, and Faculty Guest Lecture. The bottom status bar shows the date as 01-06-2023 and the time as 14:27.

Figure 8.25: Add guest lecture

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View Guest Lecture

Action	#Id	Department	Name of Faculty	Topic or Subject	Name of Resource Person	Designation of Resource Person	Resource Person Organization	Resource Person Mobile Number	Resource Person Email Id	Target Audians
[Edit]	1	NA	NA	na	na	na	na	5455454454	aasb@gmail.com	as
[Edit]	3	comp	pravin	cns	Diksha	cs	cs	4545545454	cs@cs.com	56
[Edit]	4	Information Technology	Rutu	q	q	fg_designation	q	1118483828	a@gmail.com	a

Showing 1 to 3 of 3 entries

Figure 8.26: View guest lecture

Student Details

Student Name	Pooja Dhanaji Bodke	City	Nashik
Institute Name	MVP KBTCOE	State	Maharashtra
Branch	computer	Pin code	422003
Year	BE	parent mobile	09420692130
Mobile	9307647606	Blood group	B+
Email Id	bodkepooja@kbtcoe.org	Parent Email	tnss97@gmail.com
Blood group	B+	User name	KBTUG19159

Figure 8.27: Mentee dashboard

Chapter: 8

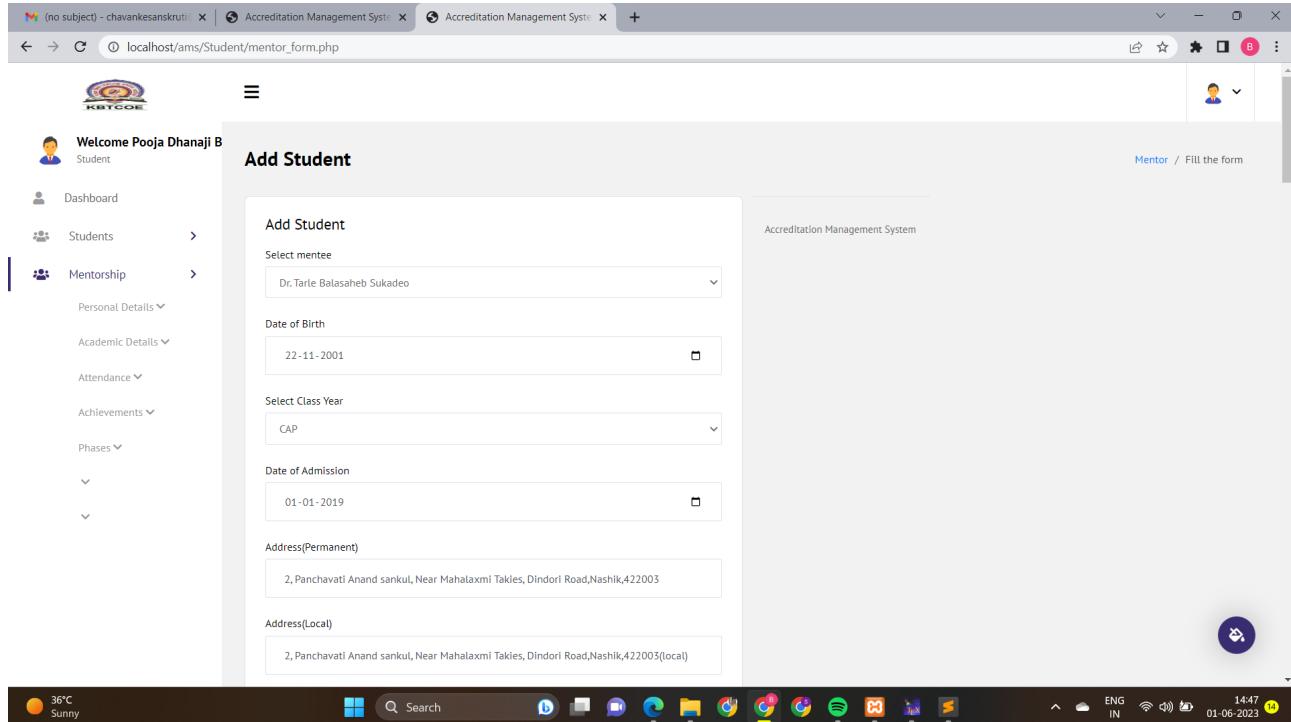


Figure 8.28: Edit personal details

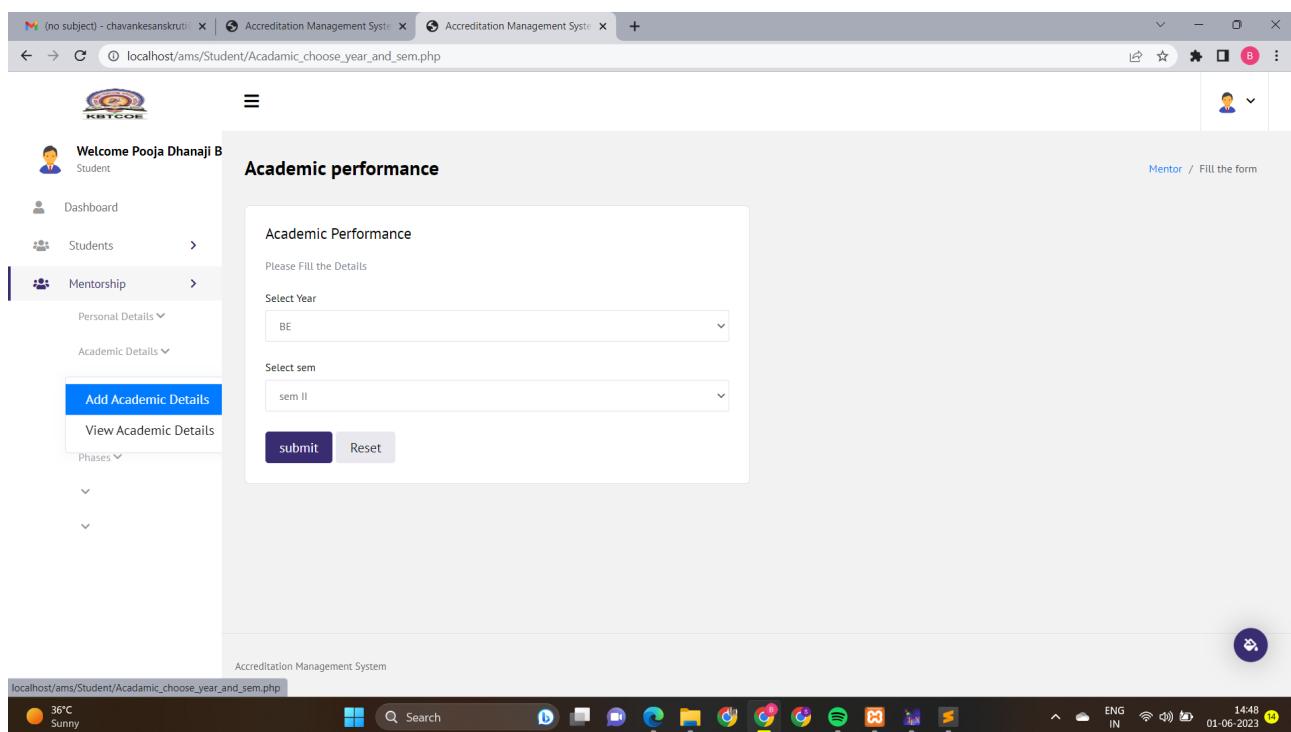


Figure 8.29: Add academic performance

Chapter: 8

The screenshot shows a web browser window with three tabs open, all titled 'Accreditation Management System'. The active tab is 'localhost/ams/Student/Academic_marks_result.php?year=BE&sem=ii&submit=submit'. The page title is 'BE Sem-II' and it says 'Please Fill the Details'. A table is displayed with columns for Id, Subject, Insem marks, Endsem marks, Termwork marks, Practical marks, Oral marks, Total marks, and Result. There are 8 rows of data. At the bottom are 'Submit' and 'Reset' buttons.

ID	Subject	Insem marks	Endsem marks	Termwork marks	Practical marks	Oral marks	Total marks	Result
2	Machine Learning							
29	High Performance Computing							
30	Deep Learning							
31	Blockchain technology							
32	Elective V							
34	Laboratory Practice V							
35	Laboratory Practice VI							
36	Project stage II							

Figure 8.30: Enter marks in blanks

The screenshot shows a web browser window with three tabs open, all titled 'Accreditation Management System'. The active tab is 'localhost/ams/Student/student_Academic_year_sem.php'. The page title is 'Academic Performance'. It displays a table with columns for #Id, Name, Username, and Marks. The Marks column includes sub-headings FE sem 1, FE sem 2, SE sem 1, SE sem 2, TE sem 1, TE sem 2, BE sem 1, and BE sem 2. One row of data is shown.

#Id	Name	Username	Marks
9	Pooja Dhanaji Bodke	KBTUG19159	FE sem 1 FE sem 2 SE sem 1 SE sem 2 TE sem 1 TE sem 2 BE sem 1 BE sem 2

Figure 8.31: View academic performance-1

The screenshot shows a web-based application interface for the KBTCOE Academic Management System. On the left, there is a sidebar with icons for Dashboard, Mentorship, and other student-related options. The main content area displays a student's academic record for 'FE Sem-I'. The student's ID is 9, and their name is Pooja Dhanaji Bodke, with a user name of KBTUG19159. A table lists three subjects: M-I, physics, and Electronics, with marks for Insem, Endsem, Termwork, Practical, and Oral components, along with a total mark and result. The result for all subjects is 'pass'. A blue circular button with a gear icon is located at the bottom right of the table.

id	Subject	Insem marks	Endsem marks	Termwork marks	Practical marks	Oral marks	Total marks	Result
37	M-I	28	67				95	pass
38	physics	29	56				85	pass
39	Electronics	30	68				98	pass

Figure 8.32: View academic performance-2

The screenshot shows a web-based application interface for the KBTCOE Academic Management System. On the left, there is a sidebar with icons for Dashboard, Students, Mentorship, Personal Details, Academic Details, and Attendance. The 'Attendance' option is currently selected. The main content area displays a form titled 'Attendance of Student' with fields for 'Select Class Year' (BE) and 'Select Semester' (first semester), and a 'Next' button. The URL in the address bar is localhost/ams/Student/select_year_and_sem.php. The system status bar at the bottom shows the date as 01-06-2023 and the time as 14:49.

Figure 8.33: Add attendance

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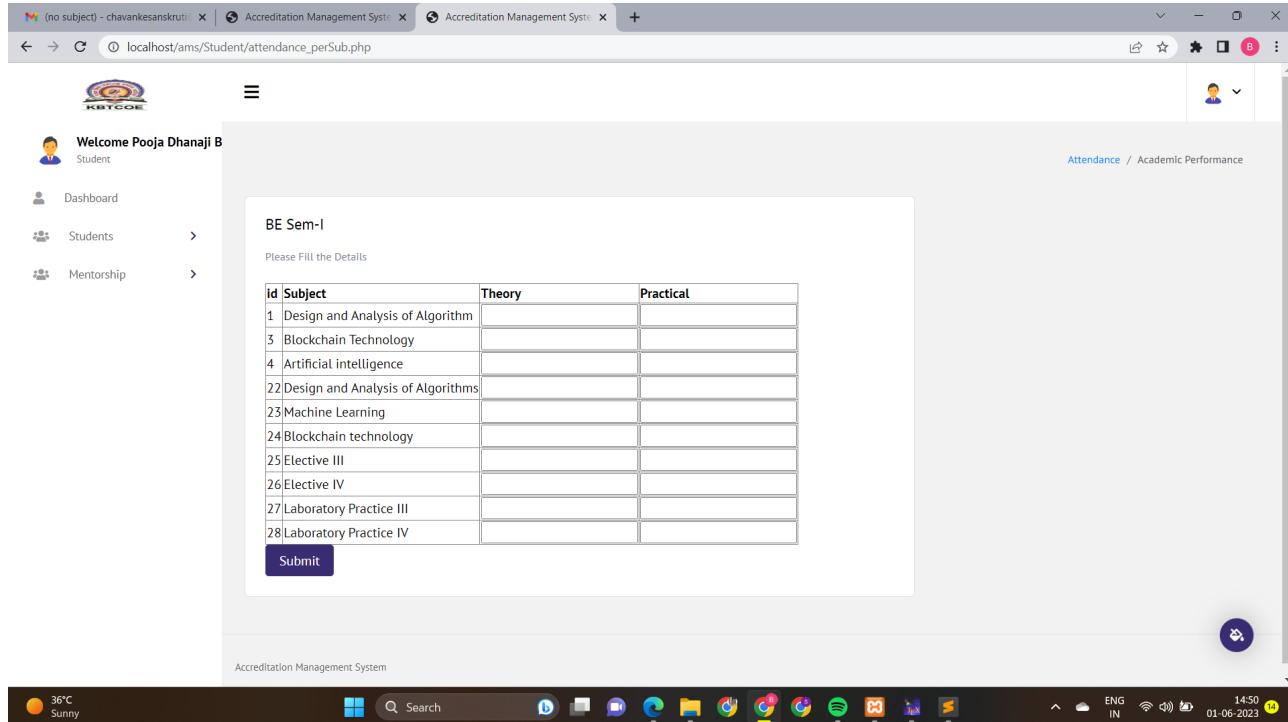


Figure 8.34: Fill attendance

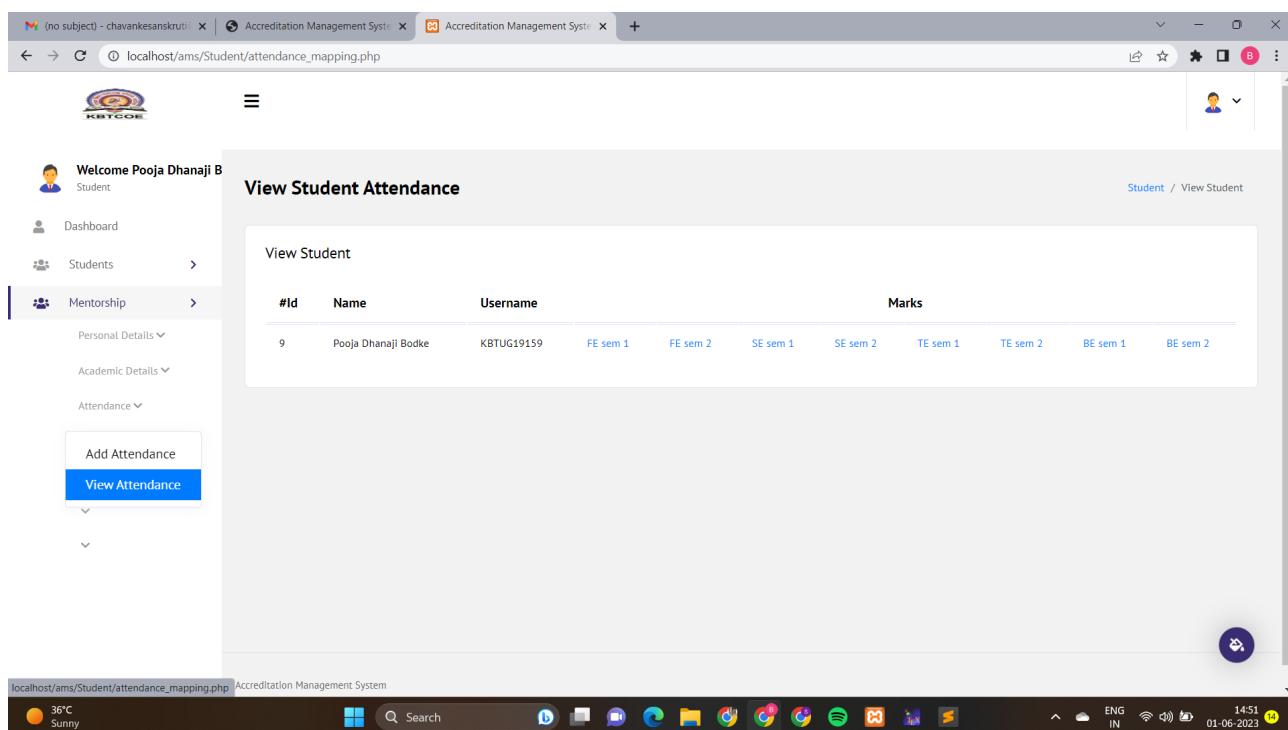


Figure 8.35: View attendance

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The screenshot shows a web browser window for the Accreditation Management System. The URL is `localhost/ams/Student/view_attendance.php?Student_Id=9&year=FE&sem=I`. The page title is "Attendance". On the left, there is a sidebar with a logo for KBTCOE and navigation links for Dashboard, Students, and Mentorship. The main content area displays "FE Sem-I" and "Student Id = 9". It shows the student's name, Pooja Dhanaji Bodke, and user name, KBTUG19159. Below this is a table with three rows of attendance data:

ID	Subject	Theory	Practical
37	M-I	90	100
38	physics	80	75
39	Electronics	68	78

The status bar at the bottom shows the date as 01-06-2023 and the time as 14:51.

Figure 8.36: View attendance semester wise

The screenshot shows a web browser window for the Accreditation Management System. The URL is `localhost/ams/Student/mentor_achievements.php`. The page title is "Achievements". The left sidebar includes a logo for KBTCOE and navigation links for Dashboard, Students, Mentorship, Personal Details, Academic Details, Attendance, and Achievements. Under Achievements, there are two buttons: "Add Achievements" (highlighted in blue) and "View Achievements". The main content area has a form titled "Achievements" with fields for "Please Fill the Details" and "Select Year". A dropdown menu for "Select Year" shows "TE". At the bottom are "Submit" and "Reset" buttons. The status bar at the bottom shows the date as 01-06-2023 and the time as 14:51.

Figure 8.37: Add achievement

Chapter: 8

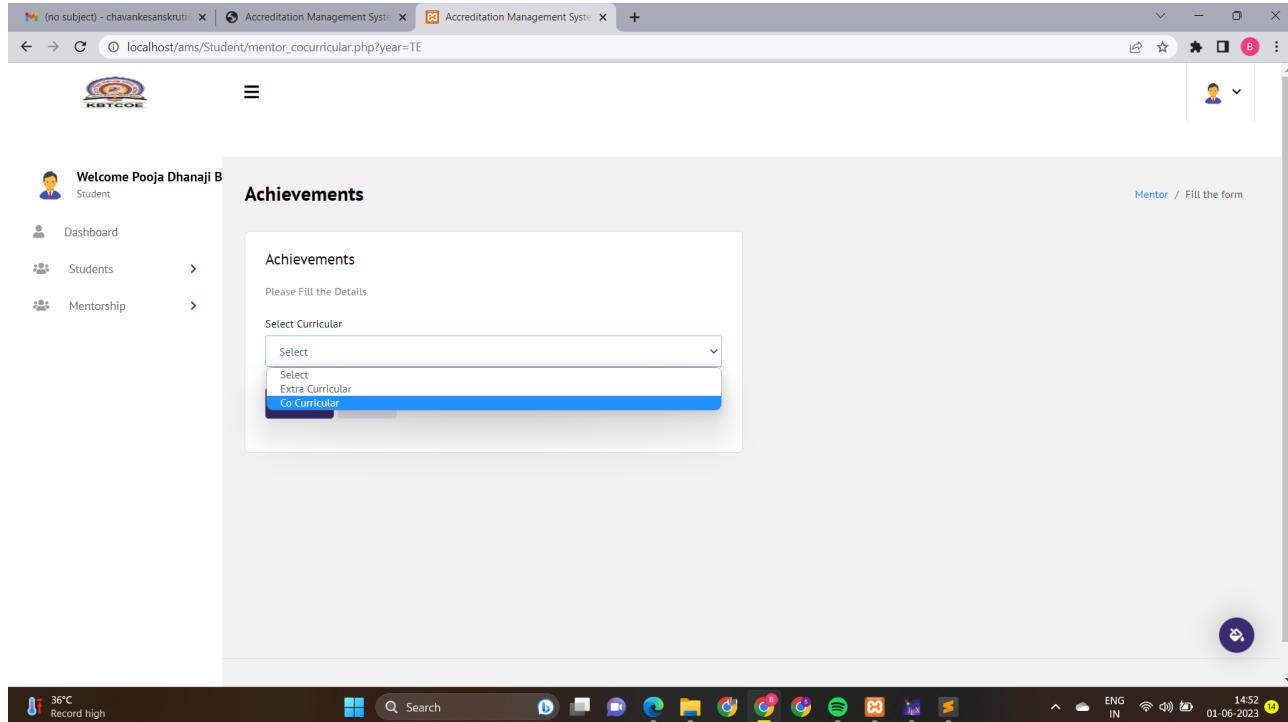


Figure 8.38: Select which achievement

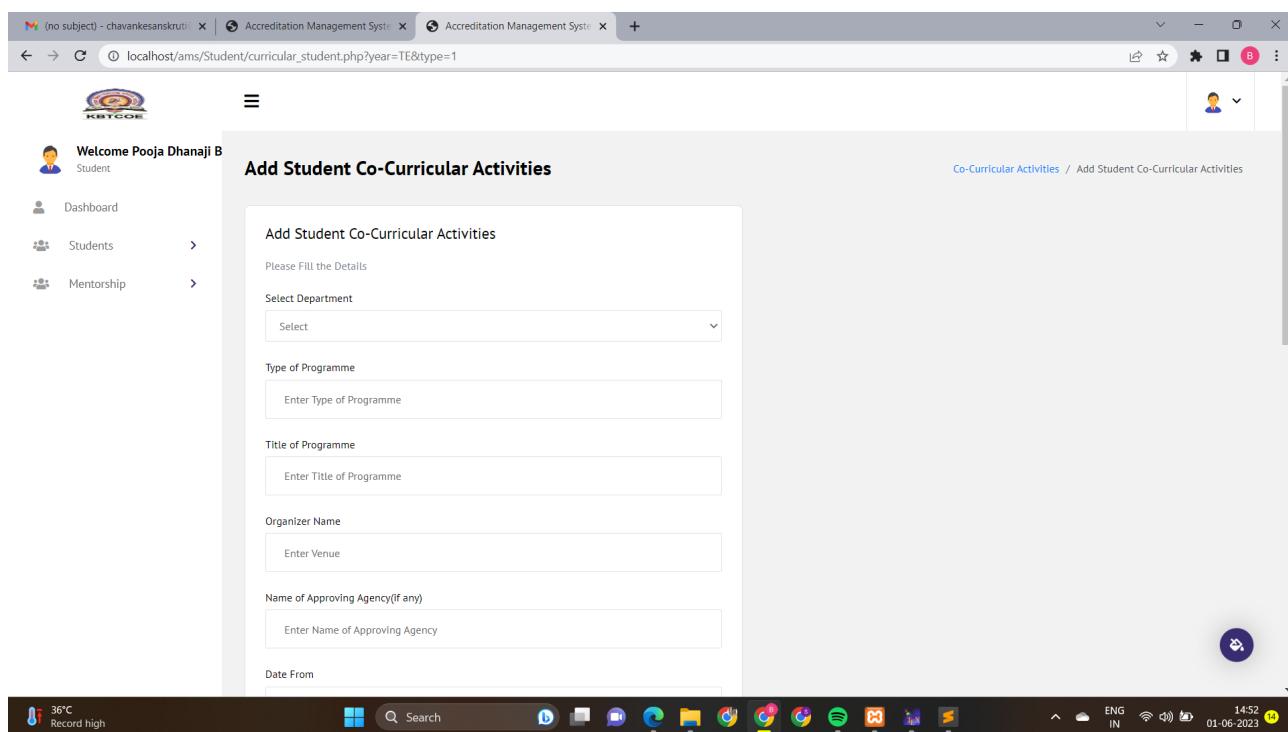


Figure 8.39: Add co-curricular

Chapter: 8

The screenshot shows a web browser window with three tabs open, all titled 'Accreditation Management System'. The active tab has the URL `localhost/ams/Student/curricular_student.php?year=TE&type=1`. The page contains fields for entering funding agency details, venue information, programme level, and email. At the bottom are 'Submit' and 'Reset' buttons.

Name of Funding Agency(if any)
Enter Name of Funding Agency

Funds Received(if any)
Enter Funds Received

Venue
Enter Venue

Level of Programme
Enter Level of Programme

Email
Enter Email

Submit Reset

Figure 8.40: Add co-curricular-2

The screenshot shows a web browser window with three tabs open, all titled 'Accreditation Management System'. The active tab has the URL `localhost/ams/Student/phase_forAll.php`. On the left, there is a sidebar with a user profile for 'Welcome Pooja Dhanaji B' (Student) and links for Dashboard, Students, Mentorship, Academic Details, Attendance, Achievements, and Phases. Under 'Phases', 'Add Phases' is highlighted. The main content area is titled 'Add Student' and contains fields for 'Select Class Year' (BE) and 'Select Phase' (Phase 1). A 'Submit' button is at the bottom.

Welcome Pooja Dhanaji B
Student

Dashboard

Students

Mentorship

Personal Details

Academic Details

Attendance

Achievements

Phases

Add Phases

View Phases

Add Student

Please Fill the Details

Select Class Year BE

Select Phase - Phase 1

Submit

Figure 8.41: Fill phases

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Figure 8.42: View phases

Action	#Id	Name of Mentor	Mentor's username	Name of mentee	Mentee mobile no.	Email	DOB	Admission type	Date of admission	Address(Permanent)	Ac
<input checked="" type="checkbox"/> <input type="checkbox"/>	11	Dr. Tarle Balasaheb Sukadeo	comp001	Ahire Pranav Dinesh			2023-02-07	DSE	2023-05-04	(permanent)	(pe)
<input checked="" type="checkbox"/> <input type="checkbox"/>	12	Dr. Tarle Balasaheb Sukadeo	comp001	Baviskar Hiranchandra Mukunda			2001-05-26	CAP	2023-05-09	(permanent)	(lo)
<input checked="" type="checkbox"/> <input type="checkbox"/>	17	Dr. Tarle Balasaheb Sukadeo	comp001	Pooja Dhanaji Bodke	9307647606	bodkepooja@kbtcoe.org	2001-11-22	CAP	2019-01-01	2, Panchavati Anand sarkul, Near Mahalaxmi Tinkles, Dindori Road,Nashik,422003	2, I sai Tal Ro

Figure 8.43: Mentor dashboard

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The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/AMS/mentorship/student_Academic_year_sem.php". The page is titled "View Student" and displays "View Student Academic Performance". On the left, there is a sidebar with a user profile picture, the name "Dr. Tarle Balasaheb Sukadeo", and roles "Faculty", "Dashboard", and "Mentee". The main content area has a table with columns: #Id, Name, Username, and Marks. The Marks column contains sub-columns for FE sem 1, FE sem 2, SE sem 1, SE sem 2, TE sem 1, TE sem 2, BE sem 1, and BE sem 2. The table data is as follows:

#Id	Name	Username	Marks							
			FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2
2	Ahire Pranav Dinesh	KBTUG19412	FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2
6	Baviskar Himanshu Mukunda	KBTUG18013	FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2
9	Pooja Dhanaji Bodke	KBTUG19159	FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2

The browser's status bar at the bottom shows the date "01-06-2023" and time "13:18".

Figure 8.44: View academic performance of student

The screenshot shows a web browser window titled "Accreditation Management System" with the URL "localhost/AMS/mentorship/attendance_mapping.php". The page is titled "View Student Attendance" and displays "View Student". On the left, there is a sidebar with a user profile picture, the name "Dr. Tarle Balasaheb Sukadeo", and roles "Faculty", "Dashboard", and "Mentee". The main content area has a table with columns: #Id, Name, Username, and Attendance. The Attendance column contains sub-columns for FE sem 1, FE sem 2, SE sem 1, SE sem 2, TE sem 1, TE sem 2, BE sem 1, and BE sem 2. The table data is identical to Figure 8.44:

#Id	Name	Username	Attendance							
			FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2
2	Ahire Pranav Dinesh	KBTUG19412	FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2
6	Baviskar Himanshu Mukunda	KBTUG18013	FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2
9	Pooja Dhanaji Bodke	KBTUG19159	FE sem 1	FE sem 2	SE sem 1	SE sem 2	TE sem 1	TE sem 2	BE sem 1	BE sem 2

The browser's status bar at the bottom shows the date "01-06-2023" and time "13:19".

Figure 8.45: View attendance of student

Welcome Dr. Tarle Balasaheb
Faculty

Dashboard

Mentee

View Student

View Student Phases

#Id	Name	Username	Details
2	Ahire Pranav Dinesh	KBTUG19412	Show
6	Baviskar Himanshu Mukunda	KBTUG18013	Show
9	Pooja Dhanaji Bodke	KBTUG19159	Show

Showing 1 to 3 of 3 entries

Previous 1 Next

35°C Sunny

Search

13:20 01-06-2023

Figure 8.46: View filled phases of student

Chapter 9

Conclusion and Future Scope

9.1 Conclusion

The amount of information created and stored in the modern digital age has increased rapidly. Online information storage and retrieval are now essential for both students and faculties. Users can store vast volumes of data in an accessible and secure manner using online information storage. Physical storage is no longer required, and the possibility of data loss is decreased. It's crucial to have quick and effective information retrieval skills. Users can now quickly and accurately search for and obtain the information they need thanks to the development of online information retrieval tools and methodologies. With the assistance of sophisticated search, for educational institutions, a college management system is a crucial tool for managing admissions, student data, course scheduling, faculty management, and financial administration, among other elements of college operations. A college management system's deployment has a number of advantages, including reduced procedures, enhanced accuracy, and increased efficiency. It makes it possible for educational institutions to keep well-organized records, automate administrative processes, and provide reports in real-time, all of which can aid in the making of data-driven decisions. A college management system can also make stakeholders, such as students, teachers, staff, and administration, more transparent by making information easily accessible and encouraging dialogue. For educational institutions looking to boost their operational effectiveness, increase the quality of their services, and maximize the use of their resources, a college management system is a wise investment.

9.2 Future Work

With the continuous advancement of technology and increasing demand for streamlined educational processes, college management systems have promising potential. Here are potential areas for expansion and enhancement:

1. Mobile Integration: Integration of mobile devices into college management systems can

enhance accessibility and convenience for users, keeping up with the growing trend of mobile usage. Incorporating artificial intelligence and machine learning can automate processes like course scheduling, student performance monitoring, and faculty evaluation.

2. Blockchain Technology: Utilizing blockchain technology can reduce the risk of data breaches and enhance the security of college administration systems. Predictive analytics can be employed to analyze student data and forecast academic achievements.
3. Virtual and Augmented Reality: The incorporation of virtual and augmented reality can enhance learning experiences by enabling students to engage more deeply with course materials.
4. Customized Learning: College management systems can integrate personalized learning technologies to tailor educational materials and content based on individual students' requirements and learning preferences.

In conclusion, there is significant potential for growth and development in mobile integration, artificial intelligence and machine learning, blockchain technology, predictive analytics, virtual and augmented reality, and personalized learning within college administration systems. These advancements may bring changes to how educational institutions operate and deliver educational content to students.

9.3 Advantages

1. Access will be quicker if the bandwidth is high.
2. Security from unauthorized user.
3. Maintenance is easy.
4. Multiple users can access the application.
5. Installation is not necessary.
6. Resources for end users are not used.

9.4 Applications

There are several uses for a college management system, which is a crucial tool for educational institutions. One of a college management system's main applications is:

1. Admissions: By automating procedures like application submission, document verification, and money collection, a college administration system simplifies the admissions process.
2. Student Records Management: Digital records of students, including their personal data, academic standing, attendance, and conduct, are kept by a college management system. The creation of reports, transcripts, and other documents using this data is possible.

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3. Course Management: A college management system aids in the coordination of faculty assignments, course scheduling, and course evaluation. Students can also examine their schedules and register for classes through it.
4. Faculty Management: A college management system aids in the administration of faculty hiring, deputizations, performance reviews, etc.
5. Management of finances: A college management system makes it easier to manage finances, which includes keeping track of expenditures, producing financial reports, and maintaining the institution's financial accounts.
6. Student, professor, and management communication is made possible through a college management system through a variety of channels, including email, chat, and messaging.
7. Data backup and disaster recovery: Users can back up vital data and files using online information storage, ensuring that they can restore them in the event of data loss or calamities like fires or floods.
8. Collaboration: Many users may access and work together in real-time on documents and files thanks to online storage and retrieval technologies. Teams may collaborate more effectively as a result, and physical storage requirements are decreased. Users can access their files and data from any device with an internet connection thanks to online information storage. This makes it simpler to work while traveling or remotely.
9. Data sharing: Sharing files and papers with others is made simple by online information storage. Colleagues can be given access to particular files or folders by users.
10. Research and Analysis: Internet information retrieval technologies let users look up and get information from a variety of sources in a snap. This helps users access pertinent information quickly and correctly for study and analysis.
11. Education: Internet information retrieval and storage are frequently employed in this sector. It is simple for teachers and students to share information, work together on projects, and access educational resources.

In conclusion, a college management system provides a number of uses that help educational institutions improve their efficiency, streamline their operations, and offer better services to their teachers, staff, and students.

Appendix A

Computational Complexity

There are numerous problems related to computer science, and these problems can be categorised based on how difficult they are in different categories. These problems can be divided into P, NP, NP-Complete, and NP-Hard problem classes. All the names P, NP, NP-Complete, and NP-Hard refer to algorithms written in Big-O notation. Big-O is a metric that expresses the upper bound in relation to the input of how rapidly an algorithm executes or solves a problem.

- P class: Polynomial time means that the running time of the algorithm is bounded by a polynomial function of the input size. Problems in P are considered efficiently solvable.
- NP class: NP is the class of decision problems for which a given solution can be verified by a deterministic Turing machine in polynomial time. In other words, if a solution is proposed, it can be checked efficiently.
- NP-Complete class: NP-Complete problems are a subset of NP that are believed to be the hardest problems in NP. A problem is NP-Complete if every problem in NP can be reduced to it in polynomial time.
- NP-HARD class: NP-Hard problems are at least as hard as the hardest problems in NP. Unlike NP-Complete problems, NP-Hard problems do not necessarily need to be in NP themselves. NP-Hardness is a measure of difficulty, and these problems may or may not be solvable in polynomial time.

Our system falls under the P class of problems because it meets the constraint of a P-class problem by producing output that corresponds with the input given within a set amount of time, such as within approximately one minute (known as polynomial time). Any problem that can be resolved or can provide an output in polynomial time falls into the group of P-class problems, as we covered previously.

Appendix B

Published /Presented Paper , Certificates of Participation/Prize winning

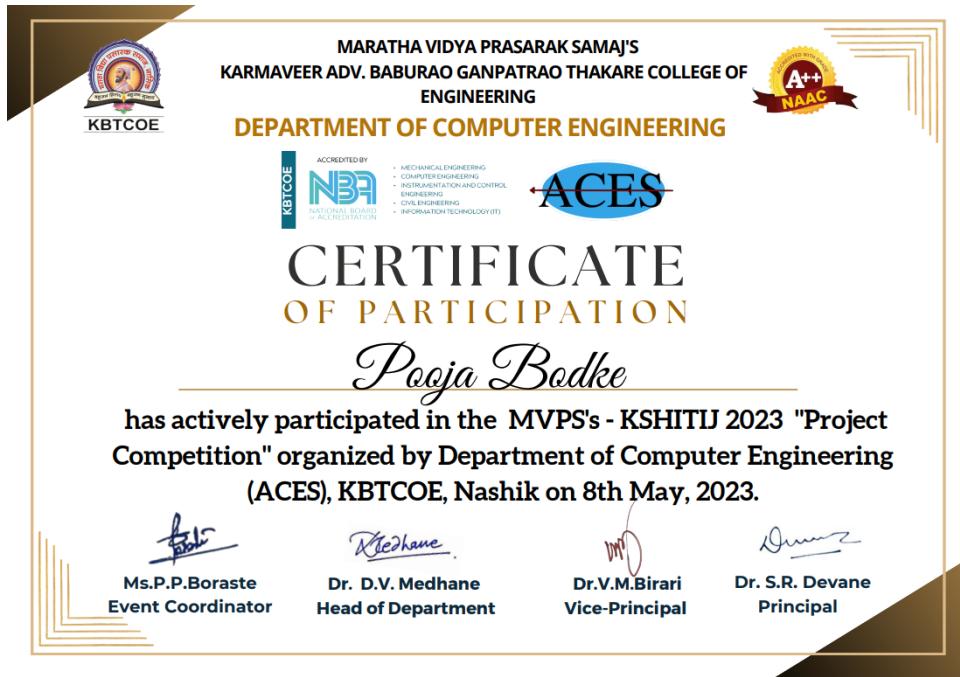


Figure B.1: MVP's KSHITIJ Certificate



Figure B.2: MVP's KSHITIJ Certificate



Figure B.3: MVP's KSHITIJ Certificate

Appendix C

Plagiarism Check Report

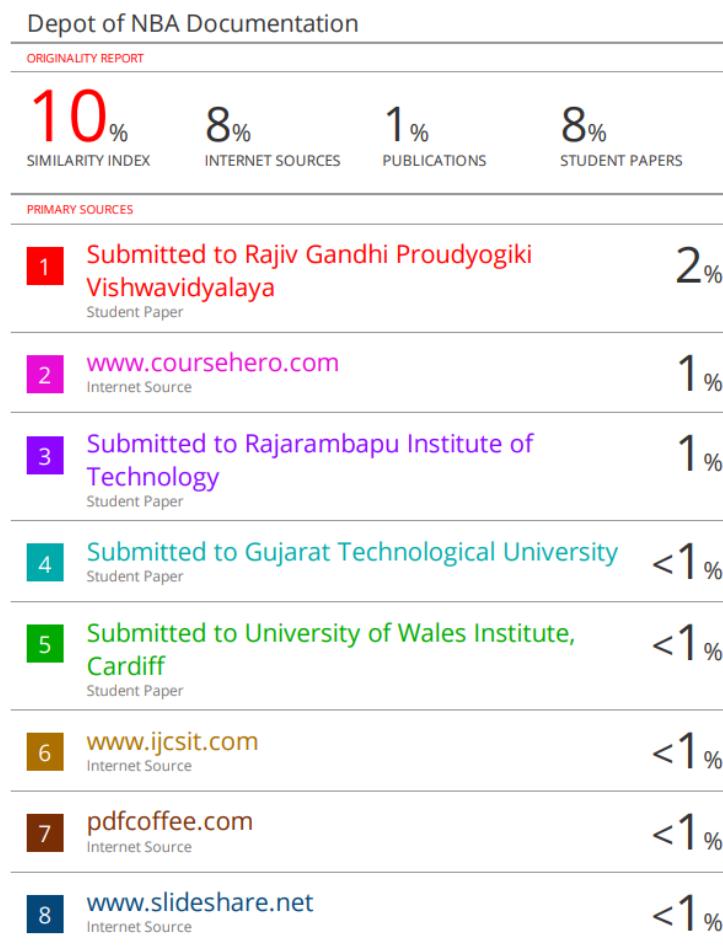


Figure C.1: Plagarism Report

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