COLLEGE AT A GLANCE

A project Report
Submitted in partial fulfillment of
The requirements for the award of the

BACHELOR DEGREE
In
Computer Application

From
University of Calicut

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Carried out at

Department of Computer Application

Safa College of Arts & Science

POOKKATTIRI

MARCH 2024

Safa College of Arts & Science

POOKKATTIRI

Certificate

This is to certify that the project report entitled **"COLLEGE AT A GLANCE"** is a record of the work done by **FATHIMA RAZA PT(SFAVBCA002), SAFA MARIYAM (SFAVBCA022),SAMEENA SHARIN MC(SFAVBCA023)** under our supervision and guidance. The report has been submitted in partial fulfillment of the requirement for award of the Bachelor Degree in Computer Application from the University of Calicut for the year 2024.

Submitted for the University Exam on:

Head of the department: **Project coordinator:**

Mrs. Asia.P **Mrs. Asia.P**

Submitted to the project and viva-voce examination held on -----/-----/----

Declaration

I hereby declare that the project report entitled "**COLLEGE AT A GLANCE**" was carried out by me as the Bachelor Degree Project in Computer Application under the guidance and supervision of **Mrs.ASIA P** Head of Department of Computer Application, Safa College of Arts & Science and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgement has been made in the text

.

Date: Signature:

Place:

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Acknowledgement

I am obediently thankful to God Almighty, praise and glory be to him, for all his uncountable bounties and guidance, without which, this work would have never been a reality. An endeavor over a long period may be successful only with advice and guidance of many well- wishers. I take this opportunity to express my gratitude to all who encouraged me to complete this project. I would like to express my deep sense of gratitude to my respected Principal Dr P V Nidhin, for his inspiration and for creating an atmosphere in the college to do the project. My sincere thanks to project coordinator Mrs.Asia P, Head of the Department of Computer Application for guiding me and giving timely advice, suggestions and whole hearted moral support in the successful completion of this project. Last but not least, I would like to thank all the teaching and non-teaching staff and my friends who have helped me in every possible way in the completion of my project.

Abstract

College at a glance is an innovative and intuitive digital platform that offers a comprehensive glimpse into the vibrant tapestry of college life. This project aims to simplify the college experience for students, faculty, and visitors by providing a user-friendly interface that seamlessly integrates essential aspects of campus existence. where you can discover faculty spots, research areas, and course offerings, facilitating smoother interactions between students and educators. Stay in the loop with the bustling college events scene, as "College At a Glance" offers an up-to-date event calendar showcasing seminars, workshops, cultural gatherings, and more. Seamlessly access the pulse of college life through the dynamic notice board, which serves as a central hub for important announcements, deadlines, and updates from the administration. Furthermore, "College At a Glance" catersto student needs by providing an array of requirements. Embrace the power of knowledge and connection with "College At a Glance" as your steadfast companion, empowering you to navigate the exciting realm of college with confidence and ease.

CONTENTS

INTRODUCTION

In an era where effective coordination and management are paramount for the success of educational institutions, the "College At a Glance" project emerges as a transformative force, poised to revolutionize the operational landscape of our college. By seamlessly integrating cutting-edge technology and intuitive design principles, this comprehensive initiative presents a unified digital ecosystem that not only enhances efficiency, transparency, and engagement but also fosters a sense of community and collaboration across various facets of campus life. At its core, the project offers an interactive campus map, providing students, faculty, and staff with a user-friendly tool to effortlessly navigate the campus and locate essential facilities such as classrooms, laboratories, and libraries. This feature not only streamlines logistical challenges but also empowers individuals to maximize their time and focus on their academic pursuits. Moreover, with the integration of a centralized class schedule module, students gain clear visibility into their academic commitments, including class timings, locations, and subjects, thereby minimizing scheduling conflicts and optimizing their academic experience. Furthermore, the project's robust event management capabilities serve as a catalyst for community engagement by providing a centralized platform for disseminating information about workshops, seminars, cultural events, and extracurricular activities, facilitating seamless event registration and timely notifications to enhance participation and involvement. Additionally, the streamlined hall booking system addresses practical challenges associated with resource management by enabling efficient reservation of venues such as auditoriums and seminar halls, thus optimizing resource utilization, mitigating scheduling conflicts, and enhancing operational efficiency. By encompassing these multifaceted functionalities, "College At a Glance" represents a holistic approach to organizational management and communication, promising to create a dynamic and enriched learning environment conducive to academic excellence, innovation, and holistic development for all members of the college community.

SYSTEM ANALYSIS

System study is done in order to understand the problem and emphasize what is needed from the system. The information requirements of the user for their competitive world Require such a system. The various techniques used in this phase are Observations, Interviews and Discussions. A complete understanding of software requirements is essential to the success of a software development effort. System Analysis refers to an orderly structured process for identifying and solving problems using computers. It is the most essential part of the project development. It is the process of gathering and interpreting facts, diagnosing problems and using the information to recommend improvements to the system. Training, experience and common sense are required for the collection of the information needed to do the analysis.

EXISTING SYSTEM

In the existing system features like events, notice boards are designed manually , and teachers' locations are already existing as separate components in other projects .Enquiries about college ,infrastructure, exam seating arrangements, staff availability ,department details ,events should be asked to officials or staff.

DRAWBACKS OF THE EXISTING SYSTEM

- Manual event and notice board management leads to delays and inconsistencies in communication..
- Dependency on officials or staff for inquiries creates communication bottlenecks.
- Limited accessibility and convenience for users navigating multiple channels.
- Manual processes increase the risk of errors, inconsistencies, and outdated information.
- Lack of automation and efficiency burdens staff and impacts productivity.
- Difficulty in tracking and reporting without a centralized system for management.

PROPOSED SYSTEM

The proposed "College At a glance" this multifaceted platform will serve as a pivotal tool to effectively manage and consolidate various aspects of our college's functioning, from its physical infrastructure to the dynamic schedules of classes and events. At its core, this system will provide a detailed overview of our college's infrastructure, offering an interactive campus map that showcases the locations of key facilities such as classrooms, labs, libraries, auditoriums, and sports areas. This information will empower students and staff to navigate the campus effortlessly, ensuring that they can promptly locate their destinations.

One of the most transformative features of this system lies in its fixed timetable and location component. students will be able to access a centralized class schedule that clearly outlines the timings, locations, and subjects of their classes. The examination management facet of the system introduces a streamlined approach to handling exams. It will provide an organized display of exam schedules, including dates, times, and locations. This transparency is augmented by information about seating arrangements, ensuring that students and examiners alike are well-prepared for the examination process.

Another remarkable inclusion is the event management module. By maintaining an updated and accessible event calendar, the system will enable students and staff to stay informed about college workshops, seminars, cultural events, and more. This centralized platform for event information will also enable hassle-free event registration and timely notifications, promoting active participation across the college community. Lastly, the hall booking system serves as a practical utility for managing the college's resources effectively. This feature permits seamless reservations for the AV hall and seminar hall, displaying available time slots, capacity, and equipment details. By digitizing this process, the system mitigates scheduling conflicts and optimizes the utilization of these spaces. Ultimately, it is poised to create an enriched and interconnected learning environment that benefits students, faculty, and administrators alike.

EXTRA FEATURES:-

- Difficulty in tracking and reporting without a centralized system for management.
- Interactive Campus Map: Helps users easily find classrooms, labs, libraries, auditoriums, and sports areas.
- Centralized Class Schedule: Provides students with clear timings, locations, and subjects of their classes.
- Streamlined Exam Management: Displays exam schedules, seating arrangements, and important exam-related information.
- Event Calendar: Keeps students and staff informed about workshops, seminars, and cultural events, facilitating event registration and timely notifications.
- Hall Booking System: Allows seamless reservations for AV and seminar halls, displaying available time slots, capacity, and equipment details, reducing scheduling conflicts and optimizing space utilization.

MODULE DESCRIPTION

Main Modules of the system are:-

- ADMIN
- HEAD OF DEPARTMENT
- TEACHER
- STUDENT

ADMIN:-

- Login
- Change password
- Department management:-
- Course management
- Staff management
- Student management
- Event management
- Syllabus management
- College profile management:-
- Manage notification
- College service management
- Fee structure management
- Fee notification management

HEAD OF DEPARTMENT:-

- Login
- Change password
- View profile
- Subject manage
- Subject allocation
- Timetable management
- Seating arrangement
- View general notification
- Internal exam management:-

- Manage exam
- Manage schedule
- Notification management
- Department management

TEACHER:-

- Login
- Change password
- View profile
- View allocated subject
- Sent subject notification

- View timetable
- View general notification
- Material upload
- View HOD notification
- View post and answer

STUDENT:-

- Login
- Change password
- View profile
- View timetable
- View notification general
- View teacher
- View fee notification
- View my seat
- Post upload
- View other post
- Send post reply
- View internal exam
- View internal exam schedule
- View university exam
- View university exam schedule
- View subject notification
- View HOD notification

FUNCTIONS OF WEBSITE APPLICATION

Admin functions involve overseeing various aspects of an institution to ensure smooth operation. This includes managing user authentication through login and password management for enhanced security. Administrators handle department and course management, ensuring effective organization and monitoring of academic offerings. They oversee staff and student management, maintaining personnel and enrollment records. Additionally, admins coordinate events, manage syllabus updates, maintain the college profile, and handle notification dissemination. They also oversee college services, such as library and transportation facilities, and manage fee structures and notifications, ensuring financial transparency and timely communication with stakeholders. These functions collectively contribute to the efficient administration of the institution.

The Head of Department (HOD) holds a pivotal role in managing various aspects of academic affairs within their department. This includes overseeing login and password protocols to ensure secure access to departmental resources. They maintain and update their profile for accurate representation and communication within the institution. Subject management involves curating course content and instructional materials, while subject allocation entails assigning faculty members to specific courses based on their expertise. Timetable management ensures efficient scheduling of classes, exams, and departmental activities. Seating arrangements are coordinated for examinations to optimize classroom space. HODs stay informed through general notifications and manage internal exams, including scheduling, supervision, and assessment. They also coordinate exam schedules and manage notifications to ensure effective communication with faculty, staff, and students. Additionally, HODs oversee departmental operations and strategic planning to meet academic objectives effectively.

FEASIBILITY STUDY

A feasibility study is a preliminary study undertaken to determine and document a project's viability. The results of this study are used to make a decision whether to proceed with the project. If it indeed leads to a project being approved, it will - before the real work of the proposed project starts - be used to ascertain the likelihood of the project's success. It is an analysis of possible alternative solutions to a problem and a recommendation on the best alternative. It, for example, can decide whether an order processing can be carried out by a new system more efficiently than the previous one. The feasibility study proposes one or more conceptual solutions to the problem set for the project. The conceptual solution gives an idea of what the new system will look like. They define what will be done on the computer and what will remain manual. It also indicates what input will be needed by the system and what outputs will be produced.

These solutions should be proven feasible and a preferred solution is accepted.

1.Technical Feasibility

Proposed system is technically feasible. Because this system is basically developed using python and android, for which the development kit is easily available and free of cost. This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology.

2.Economic Feasibility

This project is economically feasible. Because there is no need for any external equipment to run or work the project. This system is cost effective as well as time effective, Thereby making it economically feasible

3.Operational Feasibility

The project is operationally feasible because Operational feasibility is a measure of how well a proposed system solves the problems. This reviews the willingness of the organization to support the proposed system

SOFTWARE ENGINEERING PARADIGM

The software engineering paradigm which is also referred to as a software process model or Software Development Life Cycle (SDLC) model is the development strategy that encompasses the process, methods and tools. SDLC describes the period of time that starts with the software system being conceptualized.

AGILE MODEL

The Agile methodology is a project management approach that involves breaking the project into phases and emphasizing continuous collaboration and improvement .Teams follow a cycle of planning, executing, and evaluating.

ADVANTAGES

1. Software is produced early in the software life cycle.
2. Risk handling is one of the important advantages of the agile model, it is the best Development model to follow due to the risk analysis and risk handling at The all phase.
3. It is good for large and complex projects.
4. Strong approval and documentation control.
5. Break down the project into multiple, manageable unit‘s.

In this project we used an agile model for mainly handling the risks when the project is done. Due to this model we can complete every single unit fully. This is a simple and advanced model in software development. It is very effective in the case of large and complicated projects.

SYSTEM REQUIREMENTS SPECIFICATION

System Specification

Hardware and software requirements for the installation and smooth functioning of this product could be configured based on the requirements needed by the component of the operating environment that works as a front-end system here we suggest minimum configuration for the both hardware and software components. Working off with this software is specific to system environments. It includes two phases.

- Hardware Specification
- Software Specification

Hardware Requirements

• Processor	: intel pentium and above
• RAM	: 4GB above
• Storage	: 100GB harddisk capacity
• Monitor	: LED display
• Mouse	: standard mouse
• Keyboard	: standard keyboard

Software Requirements

• Operating system	: any
• Frontend	: HTML,CSS,BOOTSTRAP
• Backend	: MySQL, Python, JAVA
• Framework	: flutter, django
• IDE	: PyCharm get my brains
• Web browser	: edge, chrome, explorer
• Used language	: Python,Dart

SYSTEM DESIGN

System design is the first in the development phase for many engineered products or systems. It may define the process of applying various techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. This phase is the first step in moving from the problem domain to the solution domain. It is an iterative process through which requirements are transmitted into a blueprint for constructing the software initially. Blueprint depicts holistic new software. Some properties for the system design are:

- Verifiability
- Completeness
- Efficiency
- Traceability

1. Input Design

The decisions made during the input design are:

- To provide cost effective method of input
- To achieve the highest possible level of accuracy

Input design is the process of converting user-designated inputs to a computerized format. The input data are collected and organized into groups of similar data.

2. Output Design

Output design generally refers to the results and information that are generated by the system. The results are in interactive mode. A common user can also use the application. In output design the emphasis is given to the design of the hard copy and a soft copy of the information needed to the user.

3. Database Design

Database design is the process of producing a detailed data model of a database. This logical data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be used to create a database. The term database design can be used to describe many different parts of the design of an overall database system. Principally, and most correctly, it can be thought of as the logical design of the base data structures used to store the data. In the relational model these are the tables and views. In an object database the entities and relationships map directly to object classes and named relationships. However, the term database design could also be used to apply to the overall process of designing, not just the base data structures, but also the forms and queries used as part of the overall database application within the database management system. The process of doing database design generally consists of a number of steps which will be carried out by the database designer. Usually, the designer must: Determine the relationships between the different data elements and superimpose a logical structure upon the data on the basis of these relationships.

Normalization

Normalization is the process of decomposing a set of relations with anomalies to produce smaller and well-structured relations that contain minimum redundancy. It is a formal process of deciding which attributes should be grouped together in a relation.

First Normal Form

First Normal form (1NF) is now considered to be part of the formal definition of relational model.1NF is designed to disallow multivalve attributes, composite attributes, and their combinations. It states that the domain of an attribute must include only atomic values. A domain is atomic, if elements of the domain are considered to be indivisible units. We say that a relational schema R is in 1NF if the domain of all attributes of _R 'is atomic.

Second Normal Form

Second Normal form (2NF) is based on the concept of functional dependency. A relation R is in 2NF if it is in 1NF and every non key attribute A of R is fully dependent on the primary key. That is, relation is said to be in 2NF if each attribute An in R meets one of the following criteria:

A. It appears in the primary key.

B. It is fully functionally dependent on the primary key.

The tables designed in the proposed system contain a primary key for uniquely identifying each user.

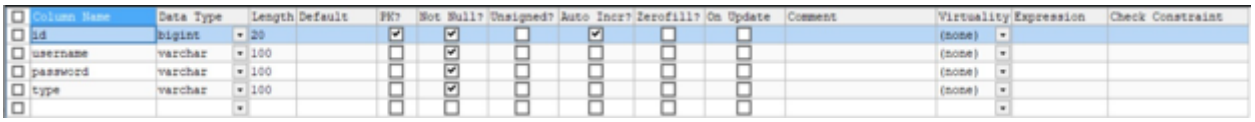
Third Normal Form

Third Normal form (3NF) is based on the concept of transitive dependency. A relation is said to be in 3NF if it is in 2NF and has no transitive dependencies. That is all the non key attributes should be functionally determined by the primary key. In the proposed system all attributes of tables are fully dependent on the primary key only, that is all non-key attributes are mutually independent.

TABLES

A database is a collection of interrelated data to store with minimum redundancy to serve many users quickly and efficiently. The general objective is to make information access easy, quick, inexpensive and flexible for the user. In a database environment, common data is available in which several users can use. The concept behind a database is an integrated collection of data and provides a centralized access to the data from the program. The following tables are used in this project.

Login table



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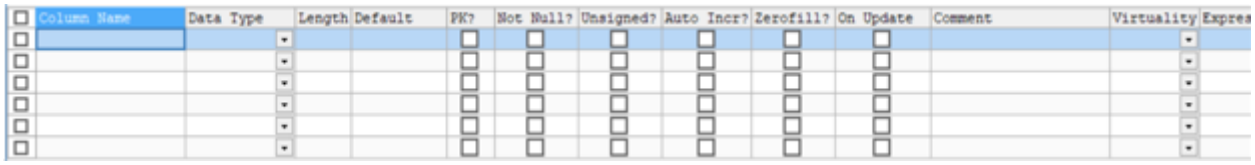
username	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
password	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
type	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Classroom table



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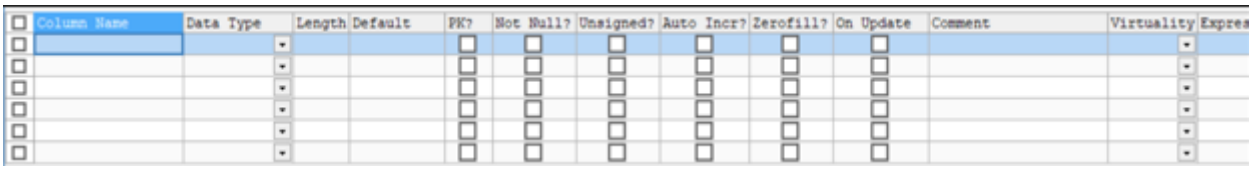
				☐	☐	☐	☐	☐	☐			
				☐	☐	☐	☐	☐	☐			

College profile table



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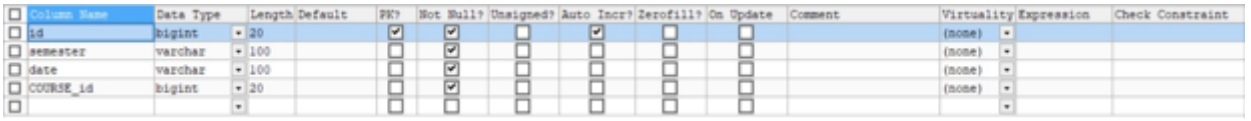
				☐	☐	☐	☐	☐	☐			
				☐	☐	☐	☐	☐	☐			

Course table



Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
COURSE_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Department table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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department	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Event table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
poster	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
title	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
HOD_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Fee notification table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
id	bigint	20		☑	☑	☐	☑	☐	☐		(none)		
date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
poster	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
title	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
HOD_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Fee structure table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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poster	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
title	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
HOD_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

HOD table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
id	bigint	20		☑	☑	☐	☑	☐	☐		(none)		
DEPARTMENT_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
STAFF_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
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HOD notification table

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HOD_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
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Internal exam table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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HOD_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Seat table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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Schedule table

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time	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
INETERN_EXAM_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
SUBJECT_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Notification table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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notification	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Inter exam schedule table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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time	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
INETERN_EXAM_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
SUBJECT_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Materials table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
material	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
STAFF_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
SUBJECT_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Post table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
id	bigint	20		☑	☑	☐	☑	☐	☐		(none)		
date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
post	varchar	500		☐	☑	☐	☐	☐	☐		(none)		
desc	varchar	200		☐	☑	☐	☐	☐	☐		(none)		
STUDENT_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Post answer table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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post	varchar	500		☐	☑	☐	☐	☐	☐		(none)		
desc	varchar	200		☐	☑	☐	☐	☐	☐		(none)		
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Staff table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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d_o_b	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
email	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
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qualification	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
house_name	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
place	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
district	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
state	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
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Student table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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state	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
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Subject allocate table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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STAFF_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
SUBJECT_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		

Subject table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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syllabus	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
COURSE_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		

Syllabus table

Column Name	Data Type	Length	Default	PK?	Not Null?	Unsigned?	Auto Incr?	Zerofill?	On Update	Comment	Virtuality	Expression	Check Constraint
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syllabus	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
COURSE_id	bigint	20		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

Time table

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date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

University exam table

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date	varchar	100		☐	☑	☐	☐	☐	☐		(none)		
				☐	☐	☐	☐	☐	☐				

ARCHITECTURE DIAGRAMS/DFD

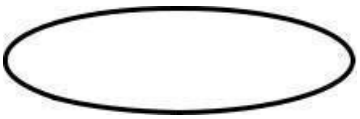
Data flow diagram issued to define the flow of the system audits resources such as information. Data flow diagrams represent one of the most ingenious tools used for structured analysis. A Data flow diagram or DFD as it is shortly called is also known as a bubble chart. It is the major starting point in the design phase that functionally decomposes the requirement specifications down to the lowest level of details.
In the normal convention,

A Data flow diagram has four major symbols.

1. Square: This defines source or destination of data

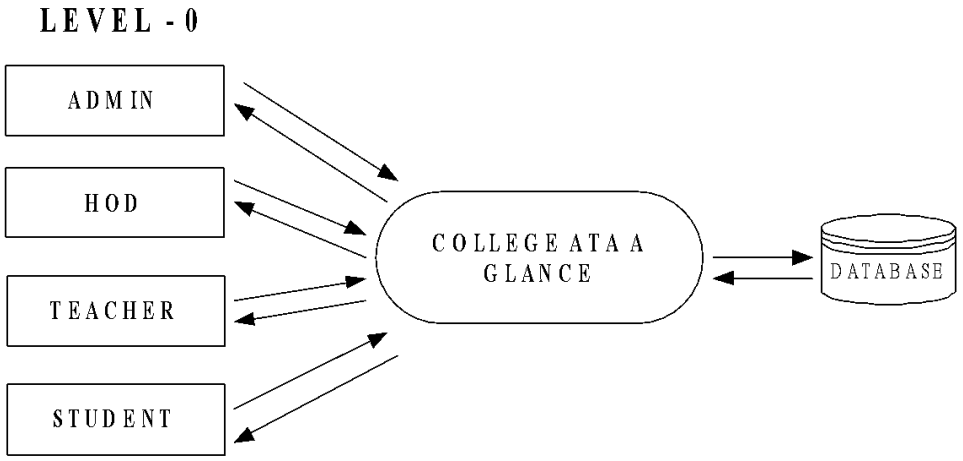
2. Arrow: which shows data flow

3. Circle: which represent a process that transforms incoming data in to outgoing flow



4. Open rectangle: which shows data store

DATA FLOW DIAGRAM



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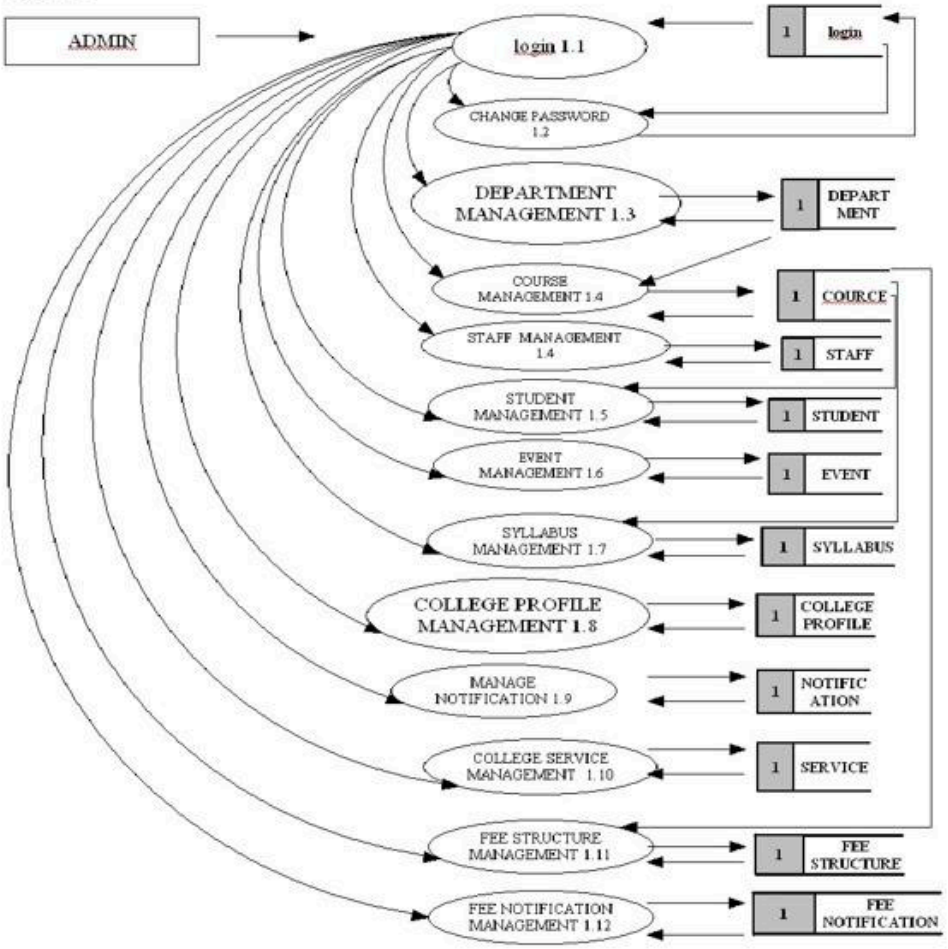
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login 1.1
1
login
CHANGE PASSWORD 1.2
DEPARTMENT MANAGEMENT 1.3
1
DEPART MENT
COURSE MANAGEMENT 1.4
1
COURCE
STAFF MANAGEMENT 1.4
1
STAFF
STUDENT MANAGEMENT 1.5
1
STUDENT
EVENT MANAGEMENT 1.6
1
EVENT
SYLLABUS MANAGEMENT 1.7
1
SYLLABUS
COLLEGE PROFILE MANAGEMENT 1.8
1
COLLEGE PROFILE
MANAGE NOTIFICATION 1.9
1
NOTIFIC ATION
COLLEGE SERVICE MANAGEMENT 1.10
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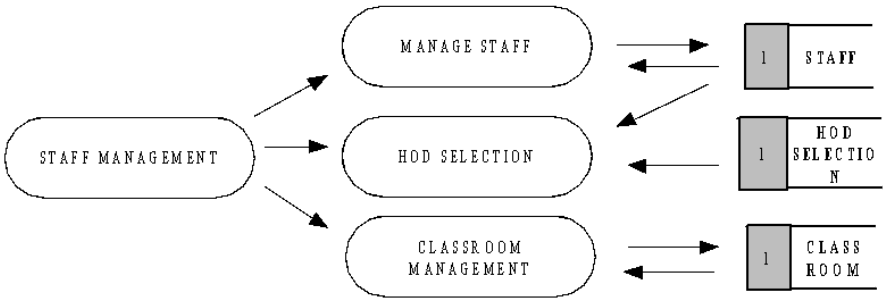
FEE NOTIFICATION

LEVEL 1.5



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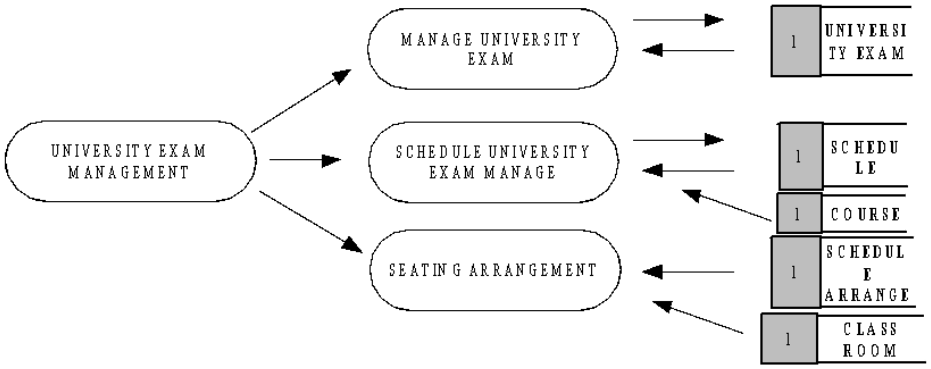

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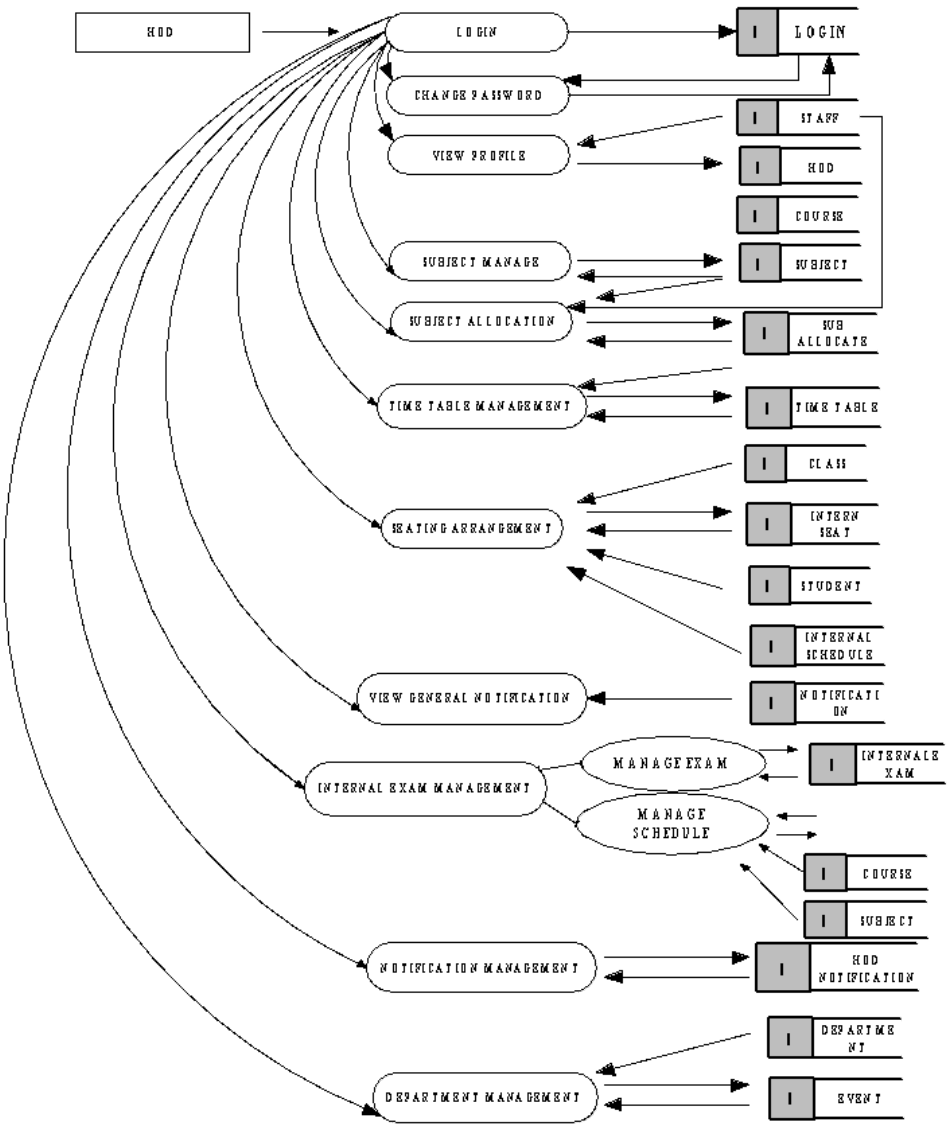
HOD
LOGIN
CHANGE PASSWORD
VIEW PROFILE
SUBJECT MANAGE
SUBJECT ALLOCATION
TIME TABLE MANAGEMENT
SEATING ARRANGEMENT
VIEW GENERAL NOTIFICATION
INTERNAL EXAM MANAGEMENT
NOTIFICATION MANAGEMENT
DEPARTMENT MANAGEMENT
LOGIN
STAFF
HOD
COURSE
SUBJECT
SUB ALLOCATE
TIME TABLE
CLASS
INTERN SEAT
STUDENT
INTERNAL SCHEDULE
NOTIFICATI ON
MANAGE EXAM
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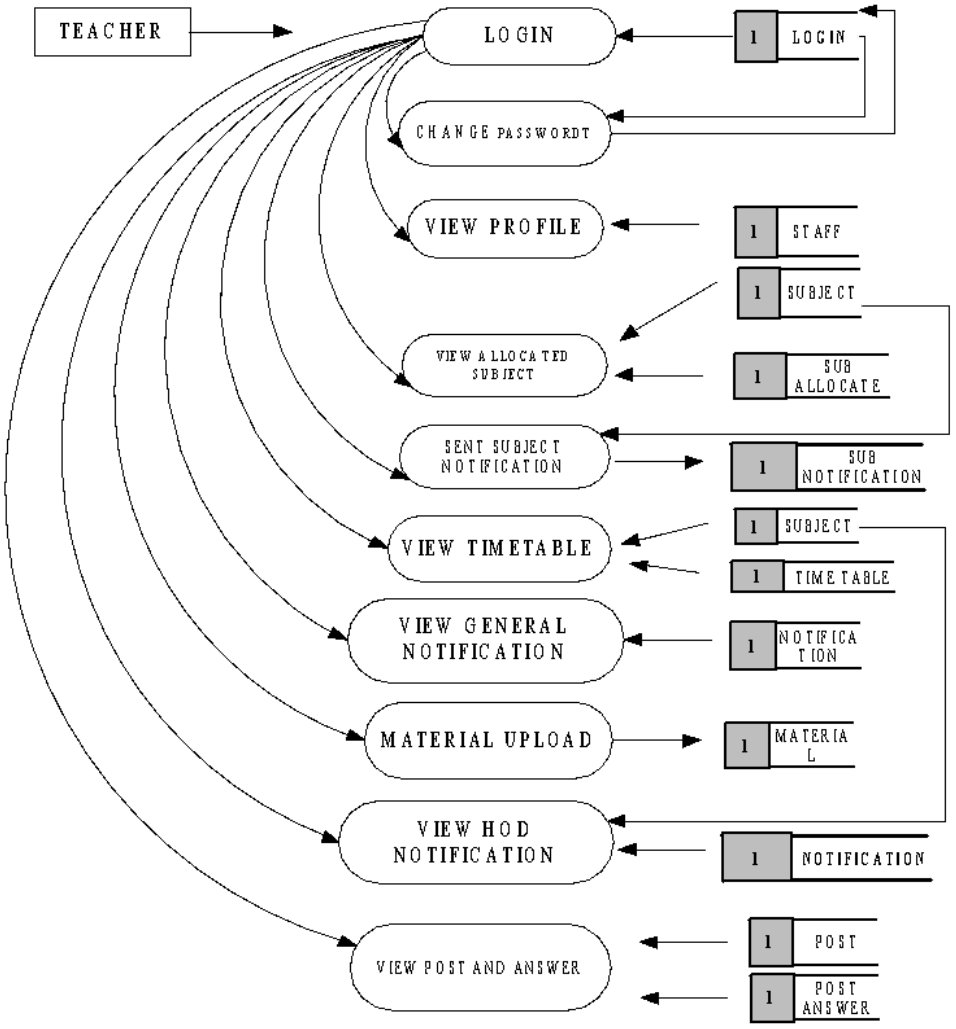
INTERNALE XAM
COURSE
SUBJECT
HOD NOTIFICATION
DEPARTME NT
EVENT

LEVEL 3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LOGIN
CHANGE PASSWORDT
VIEW PROFILE
VIEW ALLOCATED SUBJECT
SENT SUBJECT NOTIFICATION
VIEW TIMETABLE
VIEW GENERAL NOTIFICATION
MATERIAL UPLOAD
VIEW HOD NOTIFICATION
VIEW POST AND ANSWER
1 LOGIN
1 STAFF
1 SUBJECT
1 SUB ALLOCATE
1 SUB NOTIFICATION
1 SUBJECT
1 TIMETABLE
1 NOTIFICATION
1 MATERIAL
1 NOTIFICATION
1 POST
1 POST ANSWER

SYSTEM DEVELOPMENT

System development is a series of operations to manipulate data to produce output from a computer system. The Principles activities performed during the development phase can be divided into two major related sequences:

- External system development
- Internal system development

CODING

A code is an ordered collection of symbols designed to provide unique identification of an entity or an attribute. Code also shows interrelationship among different items. Codes are used to identify, access, sort, matching records. The code ensures that only one value of code with a single meaning is applied to give an entity or attribute as described in various ways.

FRONT END

HTML

Hypertext Markup Language serves as the foundation of web development, providing the structure and content for web pages. It utilizes tags to define various elements such as headings, paragraphs, links, and images, enabling browsers to render content properly**.**

JavaScript (JS)

JS is a dynamic programming language commonly used for adding interactivity and behavior to web pages. It runs client-side in web browsers, allowing developers to create interactive features like form validation, animations, and dynamic content updates without needing to reload the entire page.

CSS (Cascading Style Sheets)

CSS is responsible for styling web pages, controlling the layout, colors, fonts, and overall visual presentation. By separating the style from the content, CSS allows for consistent design across multiple pages and ensures a better user experience.

Bootstrap

Bootstrap is a front-end framework that simplifies web development by providing a collection of pre-designed components, templates, and utilities. It enables developers to create responsive, mobile-first websites quickly and efficiently, as Bootstrap handles much of the heavy lifting in terms of layout and design, saving time and effort.

BACK END

MySQL Database

Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which may run either on the same computer or on another computer across a network (including the Internet).Structured Query Language is a domain-specific language used in programming and designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS).The scope of SQL includes data insert, query, update and delete, schema creation and modification, and data access control.
SQL commands are grouped into four major categories depending on their functionality.

- **Data Definition Language (DDL)**

These SQL commands are used for creating, modifying, and
Dropping the structure of database objects. The commands are CREATE, ALTER, DROP, RENAME and TRUNCATE.

- **Data Manipulation Language (DML)**

These SQL commands are used for storing, retrieving, modifying, and deleting data. These Data Manipulation Language commands are: SELECT, INSERT, DELETE AND UPDATE.

SYSTEM TESTING

Testing is an important step in the software engineering process that could be viewed rather than constructive. Testing is the process of executing a program with the intent of finding an error. A good test is that has the probability to find an as yet undiscovered error. Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding.

Testing Strategy:

Unit Testing

Unit testing focused verification efforts on the smallest unit of software design, the module. This is also known as ―module testing. The modules are tested separately. This testing is carried out during the program stage itself. In this testing step each module is found to be working satisfactorily as regard to the expected output from the module.

Integration Testing

The integration testing is a systematic testing for constructing the program structure, while at the same time conducting tests to uncover errors associated within the interface. The objective is to take unit tested modules and build a program structure. All the modules are combined and tested as a whole. Here correction is difficult because the vast expenses of the entire program complicate the isolation of causes.

System Testing

After performing the validation testing, the next step is output testing of the proposed system since no system could be useful if it doesn‘t produce the required data in the specific format. The output displayed or generated by the system under consideration is tested.

IMPLEMENTATION

Implementation is the stage of the project when theoretical design is turned into a working system. The most crucial stage is achieving a successful system and confidence that the new system will work effectively. Implementation means converting a new or revised system design into an operational one.

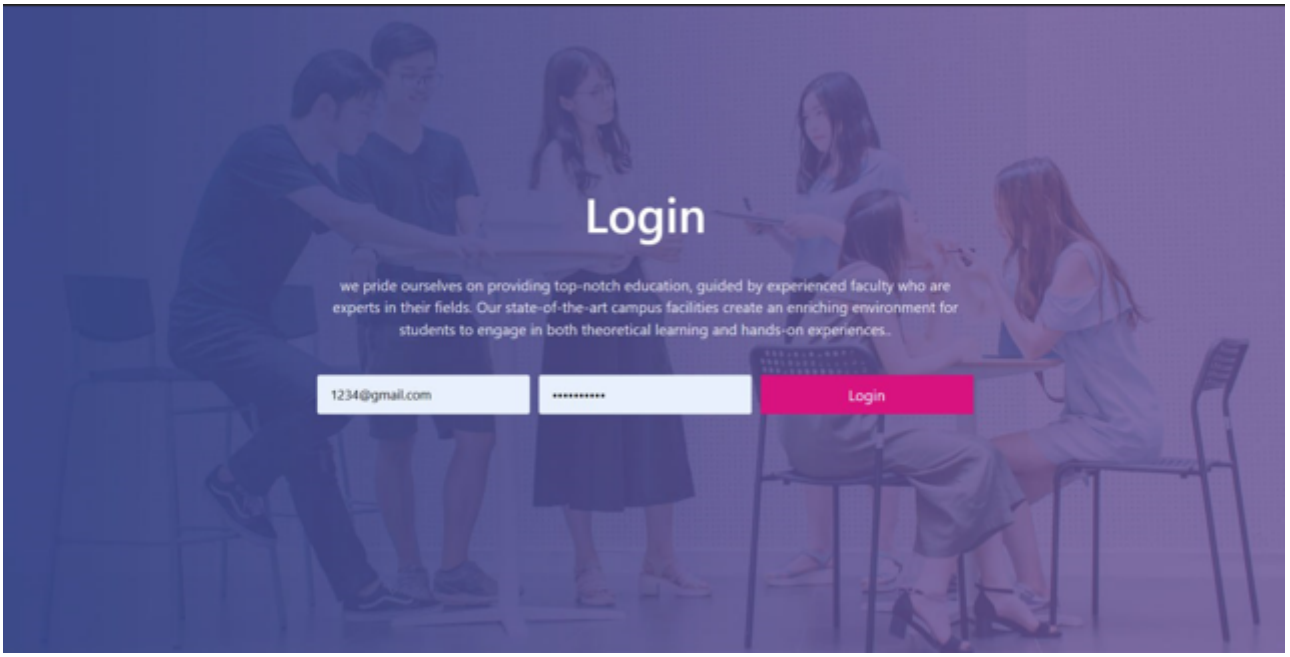
There are several activities involved while implementing a project:

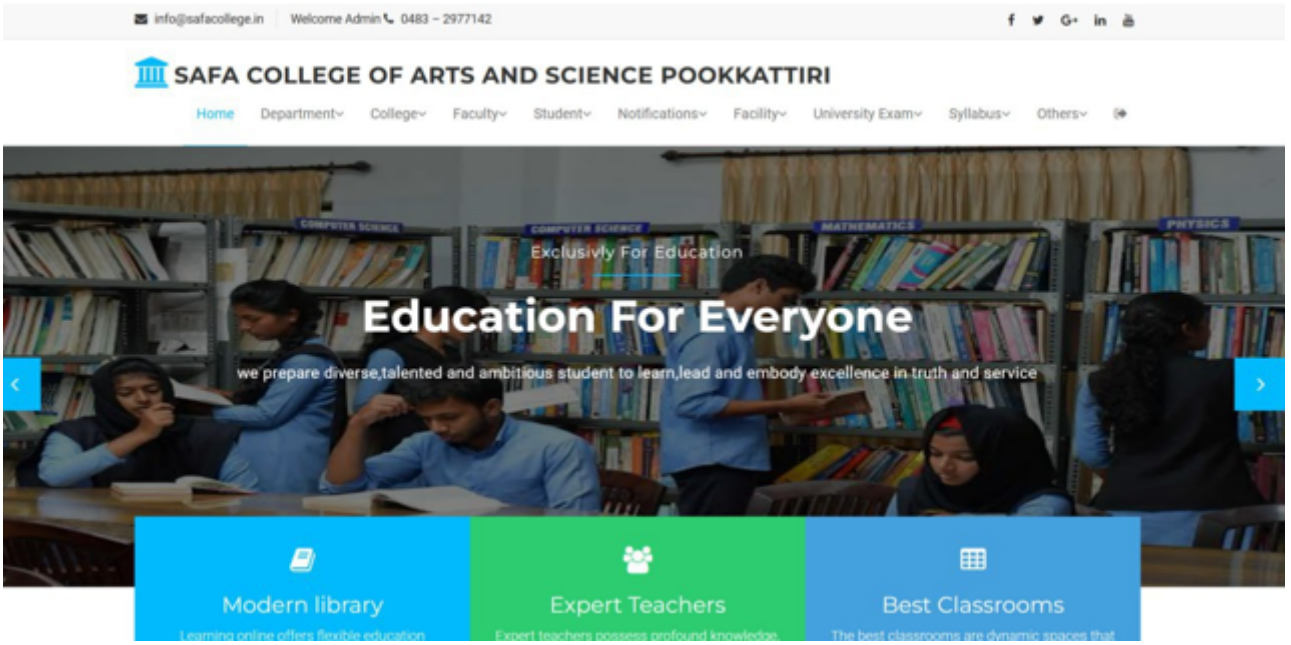
- Careful planning.
- Investigating the current system and its constraints on implementation.
- Design of methods to achieve the changeover.
- Training of the staff in the changeover procedure and evaluation of change over

Method Implementation is the final stage and it is an important phase. The first task in implementation planning, that is deciding on methods to be adopted. After the system was implemented successfully, training of the user was one of the most important sub tasks of the developer.

APPENDIX

WEB APPLICATION





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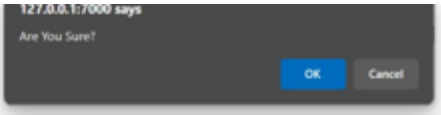
	Submit



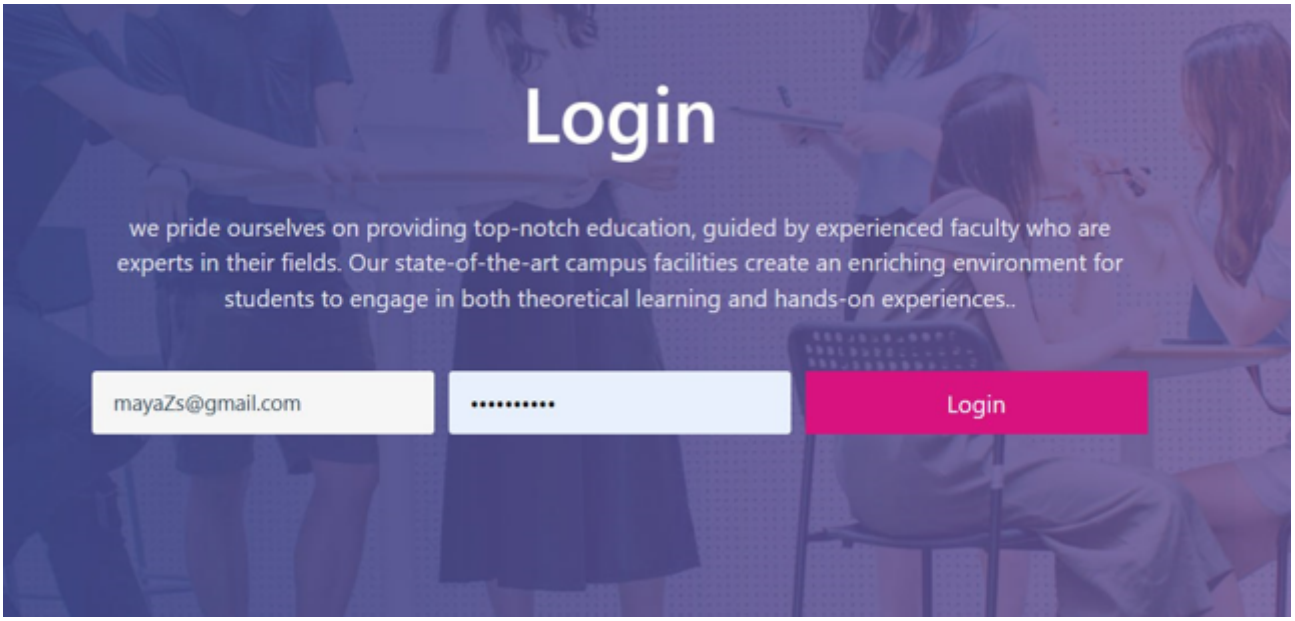
SEARCH

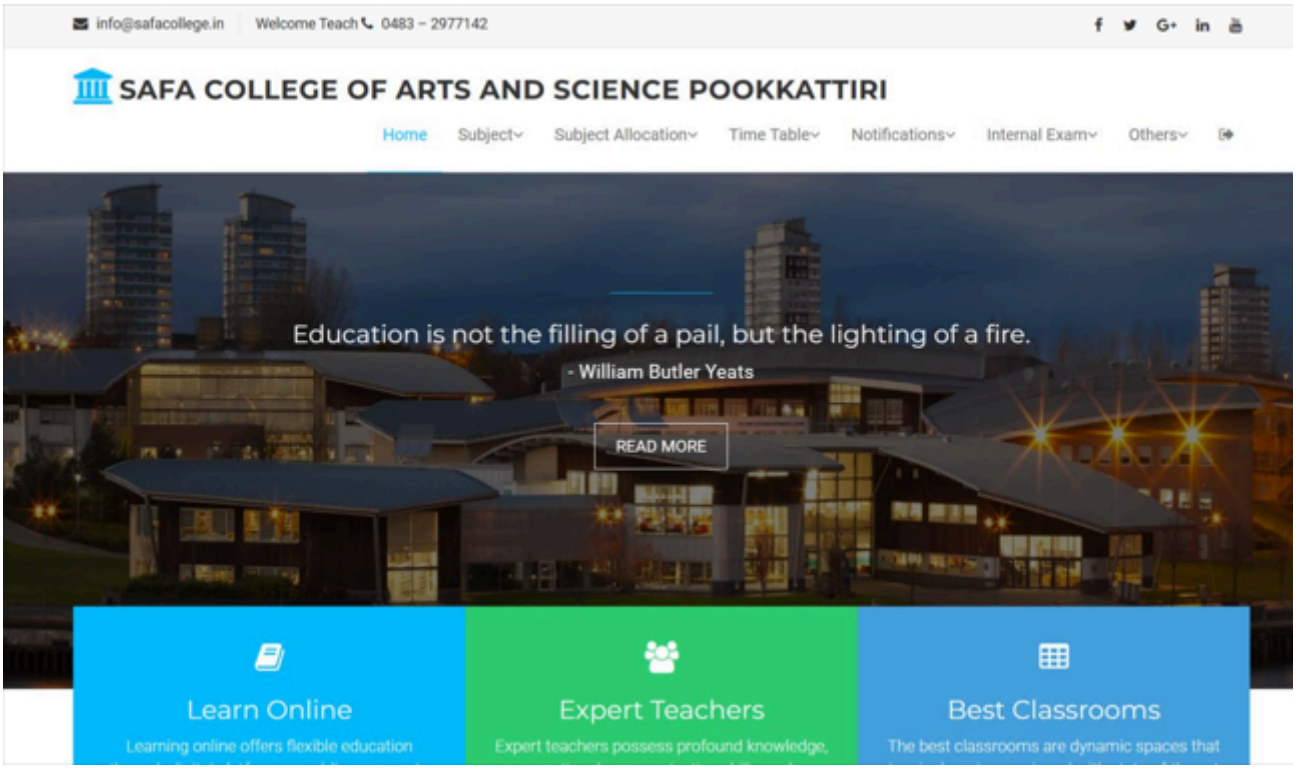
s/no	department		
1	bca	edit	Delete
2	commerce	edit	Delete
3	psychology	edit	Delete

SEARCH

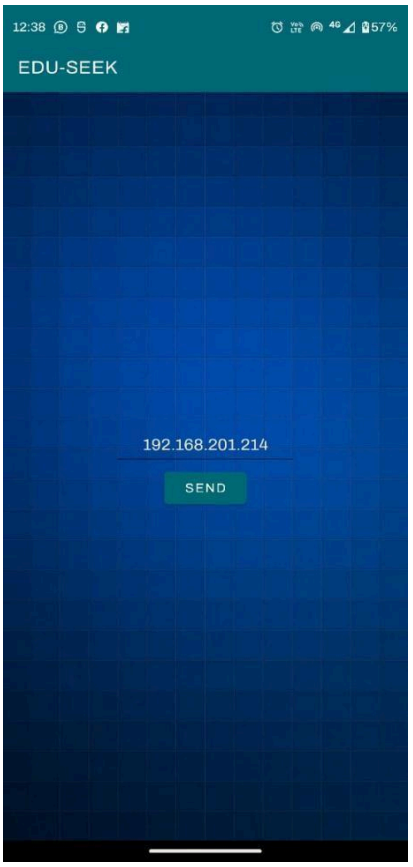
s/no	department		
1	bca	edit	Delete

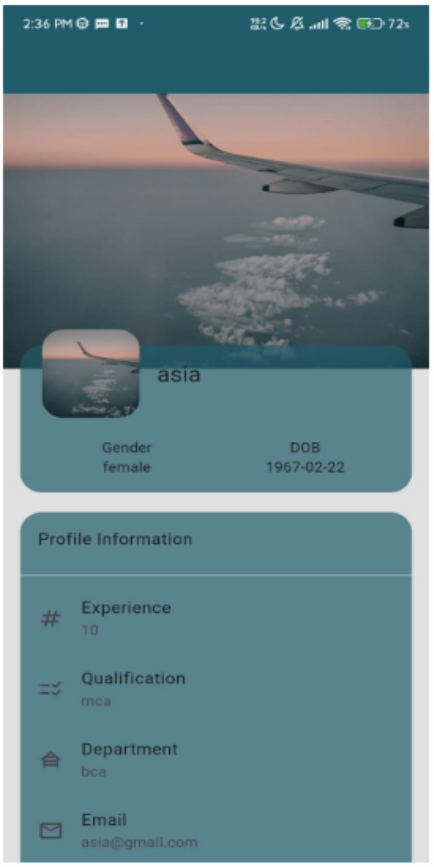
name	Safa College Of Arts And Science
photo1	 Choose File No file chosen
photo2	 Choose File No file chosen
photo3	 Choose File No file chosen
about us	provide quality education,
location	Pookattitiri ,Perinthalmanna Road , Valanchery
moto	education
	Submit

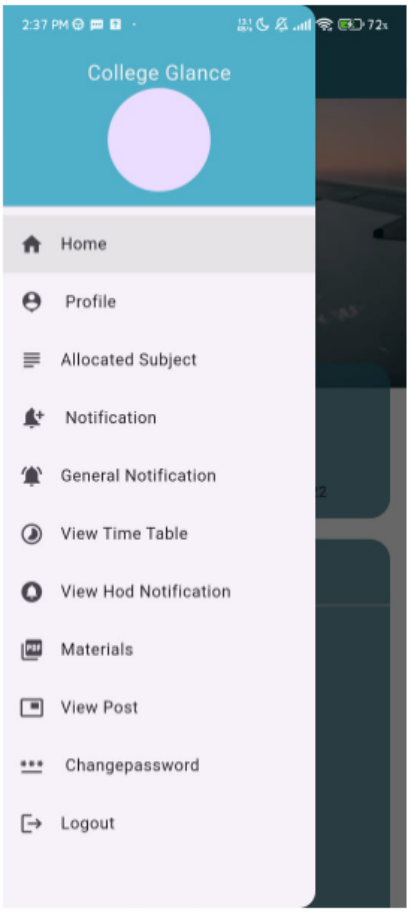


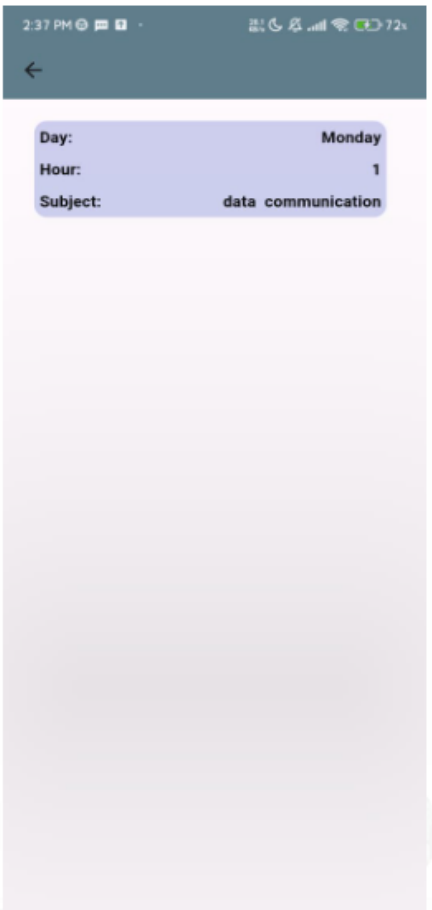

info@safacollege.in
Welcome Teach 0483 – 2977142
SAFA COLLEGE OF ARTS AND SCIENCE POOKKATTIRI
Home
Subject
Subject Allocation
Time Table
Notifications
Internal Exam
Others
Education is not the filling of a pail, but the lighting of a fire.
- William Butler Yeats
READ MORE
Learn Online
Learning online offers flexible education
Expert Teachers
Expert teachers possess profound knowledge,
Best Classrooms
The best classrooms are dynamic spaces that

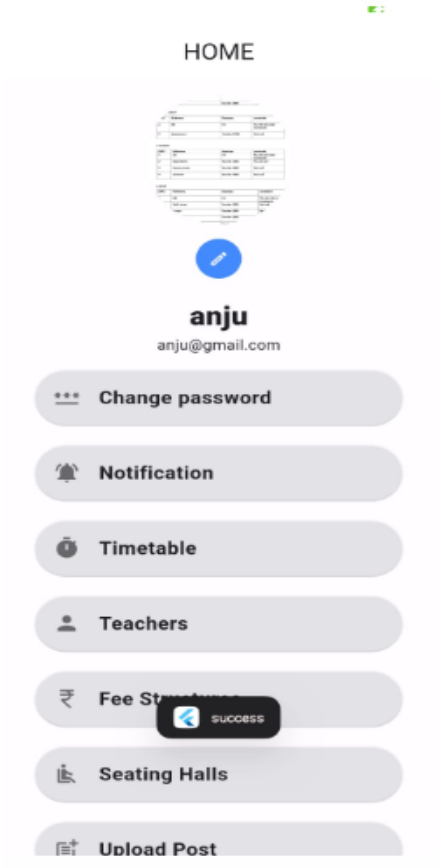
ANDROID APPLICATION










HOME
anju
anju@gmail.com
Change password
Notification
Timetable
Teachers
success
Seating Halls
Upload Post

FUTURE ENHANCEMENT

1.Implement mobile app functionality for convenient access to campus information, schedules, and event updates.

2.Enhance the interactive campus map with features like real-time navigation and location-based services to assist users in finding specific facilities more efficiently.

3.Integrate feedback mechanisms to gather input from students, faculty, and staff for continuous improvement and refinement of the platform's features and usability.

4.Explore the possibility of integrating AI-powered chatbots to provide instant assistance and support for common queries related to schedules, events, and campus navigation.

5.Collaborate with relevant stakeholders to expand the platform's capabilities to include additional services such as virtual campus tours, student directory, and academic resource repositories.

CONCLUSION

The "College At a Glance" system represents a significant step towards modernizing and improving the overall efficiency of our institution. By providing a centralized platform for managing various aspects of college life, it aims to streamline operations and enhance the experience for students, faculty, and staff alike. With its interactive campus map, individuals can effortlessly navigate the sprawling campus, finding key facilities such as classrooms, labs, and libraries with ease. The inclusion of a centralized class schedule ensures that students are always aware of their class timings and locations, reducing confusion and late arrivals. Moreover, the system's exam management feature brings transparency to the examination process, displaying schedules, seating arrangements, and other pertinent details to ensure a smooth testing experience for all involved. The event management module keeps everyone informed about upcoming workshops, seminars, and cultural events, promoting engagement and participation across the college community. Additionally, the hall booking system simplifies the reservation process for important spaces like the AV hall and seminar rooms, optimizing resource utilization and reducing scheduling conflicts. Ultimately, the implementation of this multifaceted system promises to create a more organized, interconnected, and enriched learning environment for everyone within the college ecosystem.

BIBLIOGRAPHY

REFERENCES:

Websites:-

- https://www.python.org/
- https://flutter.dev/multi-platform/web
- https://stackoverflow.com/
- https://github.com/

Books:

- Clean Code
- Design Patterns