COLLEGE MANAGEMENT
SYSTEM

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**PRESENTED BY** 

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### Introduction

The College management system is the ultimate solution to digitize and streamline the day - to - day operations of colleges and universities. From student details management to college details management.

This project is used to generate reports. the details enterend by the students and admin can be downloaded in the form of Excel sheets. In this way we can reduce data inconsistency and redundancy.

The approach of the software has several benefits. It has an email Id and password for all the process connected to the college.

Students can update their profile whenever they want.

## **Problem Statement**

There is a problem with manual entering of data in Excel sheets because, the burden of entering data will be on single person and data redundancy will be happen.

Manually entering data in Excel takes long time if the data is too big. updating of data and inserting may takes time.

But, with this system we can generate reports accurately we can update, insert, search, delete easily.

Students will enter and update their details so there will be no burden on single person. This system is userfriendly.

### **System Analysis**

The System Analysis is a crucial phase in the software development process where the software requirements are identified, analyzed, documented, and prioritized.

**Requirement Analysis:** Is a process of identifying and documenting the needs and expectations.

- It also helps to ensure that the software development team has a clear understanding of what needs to be developed, tested, and delivered.
- This process helps to identify potential issues and risks that may impact the software development process, such as conflicting requirements or missing requirements.

### **System Analysis**

**Functional Requirements:** defines a function of a software system and how the system must behave when presented with specific inputs or conditions. some of the requirements are

- Admin should manipulate the contents, Students can manipulate their details.
- Both admin and students must have login credentials. there should be different UI for both.
- System should generate reports. these can be downloaded in the form of Excel.
- The files uploaded by the students and admin should be open in excel sheets when clicked.
- Students can add and update their achievements.

### **System Analysis**

**Non-Functional Requirements:** It specifies criteria that can be used to judge the operations of a system rather than specific behavior.

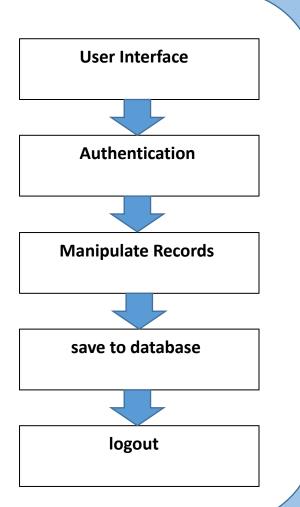
- Performance: The System should be able to add, update, delete records quickly and with minimal delay or lag.
- Security: The System should be secure, with appropriate measures in place to prevent unauthorized access or malicious attacks.
- Usability: The system should be intuitive and esy to use, with clear instructions for users.
- Availability: The system should be always available to users, with minimal downtime for maintenance or updates.

### **System Design**

**System Architecture**: Refers to the design and structure of a system, including its hardware, software, and other components.

Good system architecture is essential for building complex system

**Design**: The design of the college management system, to create an accurate, reliable and easy-to-use system.



### Implementation

This application is developed to achieve a goal that to generate reports in the form of excel sheets. Admin and Students will be having credentials for login.

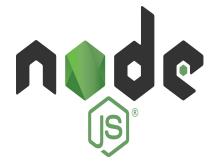
- First Students will enter their details so that account will be created to students. login credentials will be their college mail Id and password will be "Auce@123". Admin have to register first and then login.
- There will be different UI for admin and students. Admin can access everything. but, students can update their profile and add their achievements.
- Reports will be generated by Admin when they want.
- Admin can Add, Remove, Update details.

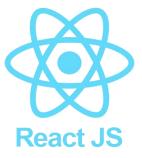
## Implementation

**Frontend**: Is implemented using ReactJs a Scripting language in VS Code. Data is taken manually through front-end user interface

**Backend**: Is implemented using NodeJs a framework in Editor VS Code. All the queries are written in backend

Middleware/Database: Is implemented by My Sql database, all the data aded by the users stored here users can retrieve whenever they want.







## Testing

Once the project implementation is completed then testing will start. Testing is one of the main phases it is a process of executing a program with the intent of finding in errors and bugs.

**Types of Testing:** There are many types of testing methodologies. but we use few testing types some of them are

**Black Box testing**: We give different type of inputs and check the output without any internal code knowledge.

White Box testing: We check all the loops and structure. we give input according to the loops and structure and check the output.

**Unit testing:** Whenever a module is finished we check it individually means all the functions are checked individually.

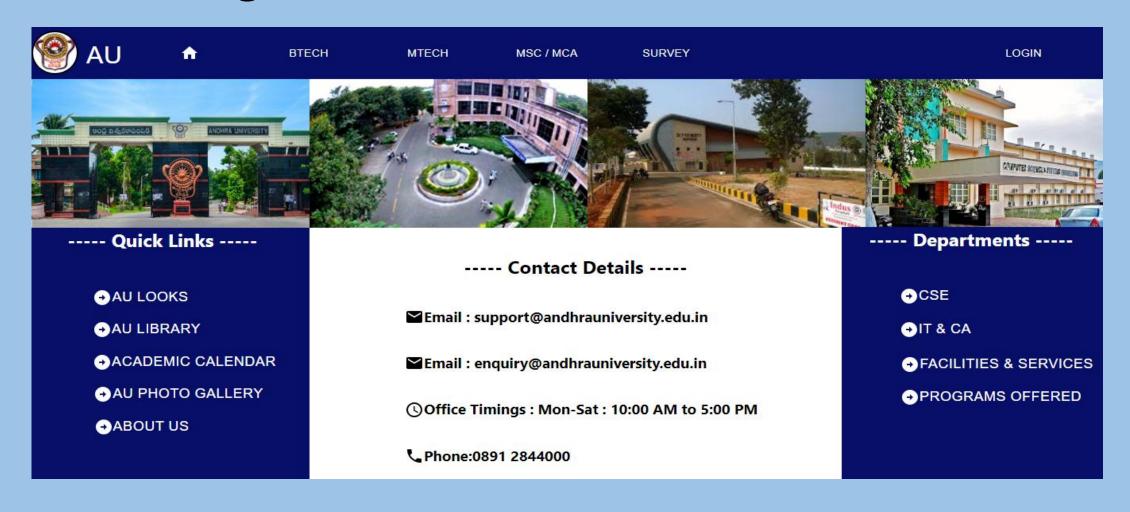
# Testing

#### **Test Cases:**

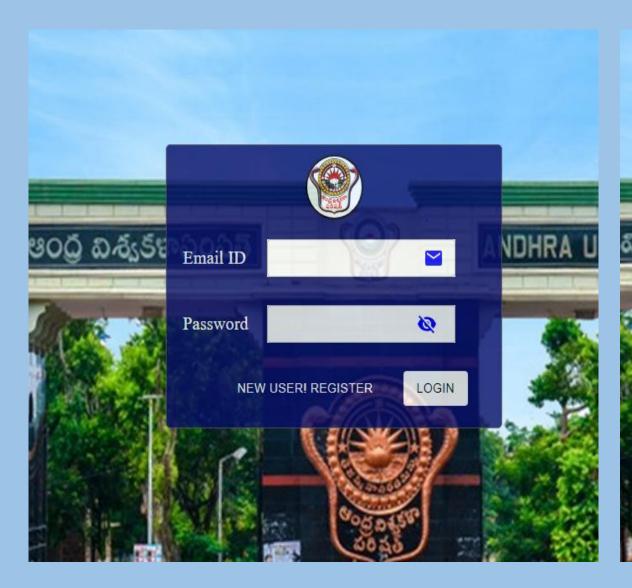
S.No	Test case description	Expected Result	Actual Result	Status
1	Enter email and password	Go to Admin/Student home page	Go to home page	pass
2	register	Go to login page	Go to login page	pass
3	Save,update,delete,view details	Operation should be performed	successful	pass
4	See user information	Only admin	successful	pass
5	Generate Reports	Operation should be performed	Operation should be performed	pass
6	Records search	Operation should be perform	successful	pass
7	Download as excel	Excel file should be downloaded	Successful download	pass
8	Update student details	Update new details	Successful updation	pass

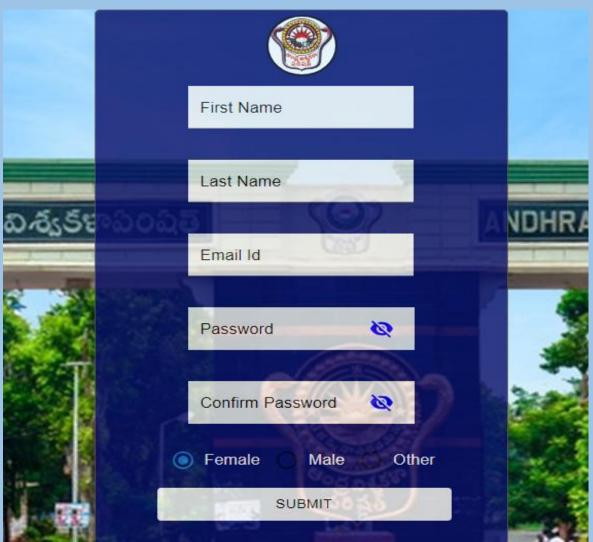
### **CMS Screens**

### Home Page

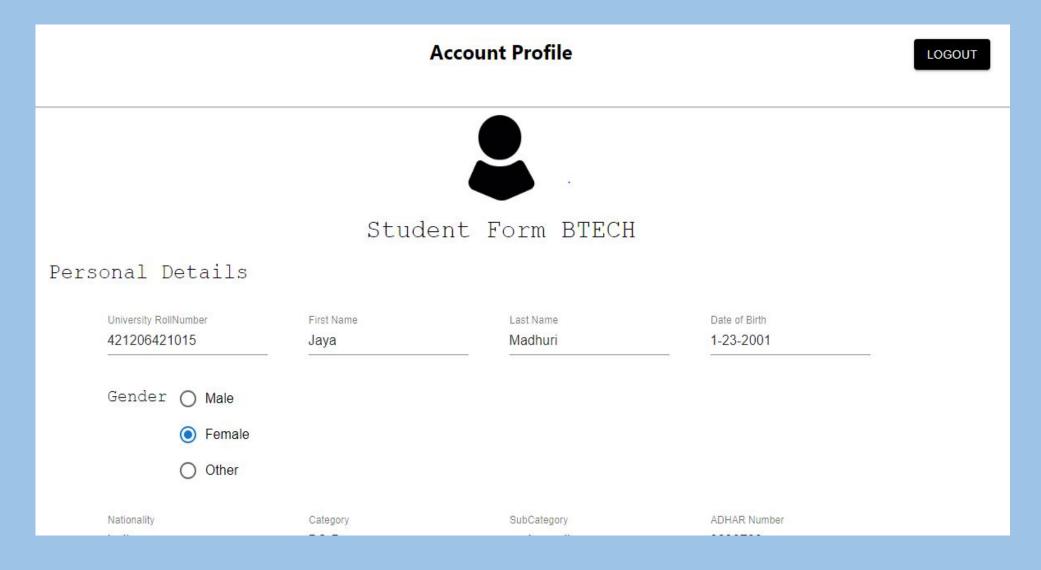


### Login and Register Page



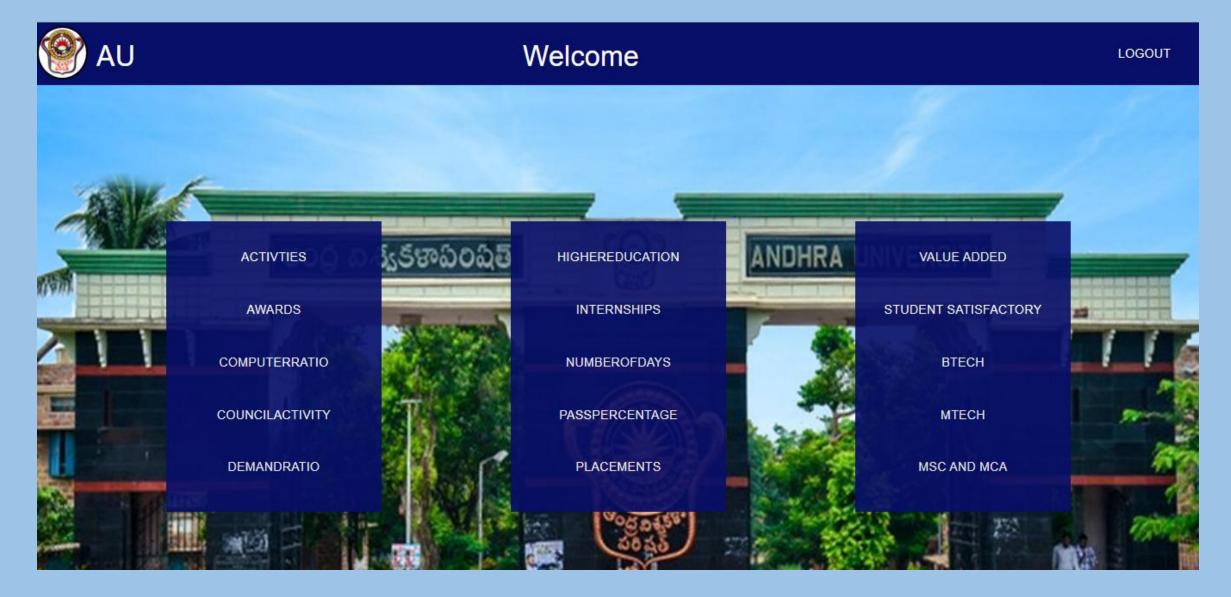


### Student Home Page

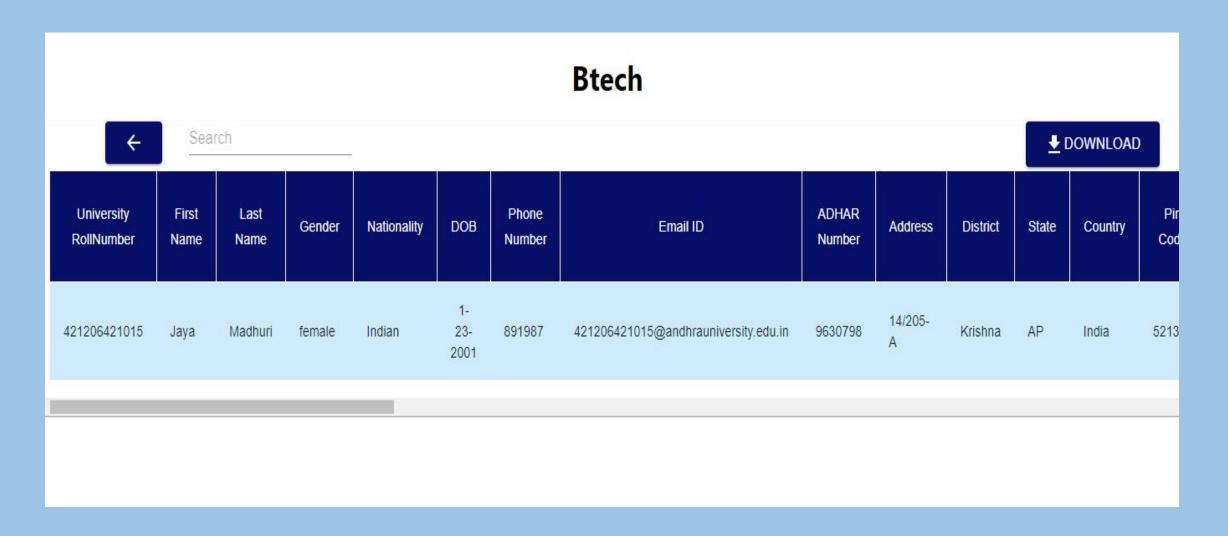


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Certificates			
Certificate Course	Certificate IssuedBy	Certificate Platform	CERTIFICATE 🕞
Internships			
Company	Duration	CERTIFICATE 🕞	
Placement Details			
Number of Companies	Company Name	Package	OFFERLETTER 🕞
		EDIT	

### Admin Home Page



### **View Student Details**



### Forms to add and update Details of an Operation

