

## ***Software Requirement Specifications***

Name: Renita Helen E

Seat No. : 12

Project Id: 12

Project Title: Infra Audit Analysis Report Generator

### **1. TECHNICAL COMPONENTS:**

<b>Components</b>	<b>Technical Stack</b>
Front End Tools	HTML, CSS, and JavaScript
Back End Tools	Django, Python
Database Tools	MySQL
API	Open API

### **2. PROBLEM STATEMENT:**

The lack of a system to organize the process of assigning auditing tasks and the communication between the auditor and the head who assigns the task. For instance, errors resulting from missing data in reports may compromise the accuracy of the audit analysis. Additionally, manual communication between the auditor and the head might lead to inefficiencies and time-consuming interactions. The overwhelming responses from each audit have to be analyzed and reported manually.

- **Incorrect Generation of Report:** Missing data or two while generating the report may result in errors when generated manually.
- **Ineffective Communication:** The communication between the auditor and the head is done manually which may be ineffective and time-consuming.
- **Complex Processes:** The entire process becomes complex once the audit forms from various sources are collected and analyzed for results.
- **Task Assignment and Communication:** Implement a task assignment module with automated notifications and real-time updates between auditors and administrators to streamline the workflow and reduce manual errors.
- **Report Generation:** Introduce data validation checks and automated report generation to ensure completeness and accuracy, reducing the risk of missing data in reports.

### 3. PROJECT OVERVIEW:

#### 3.1. Purpose:

To create a portal that can effectively organize and regulate the task generation process and follow up with the auditing progress. A platform to also automate the process of generating reports.

- **Task Assignment and Progress Monitoring:** Extend the system to provide real-time progress tracking and notifications for auditors, improving transparency and accountability.
- **Visualization Dashboard:** Incorporate a visual analytics dashboard for administrators to gain insights from auditing data, enabling data-driven decision-making.

#### 3.2. Scope:

This system is aimed to aid the Infrastructure team with auditing tasks.

- This system enables the administrator of the Infrastructure team to assign tasks and monitor the progress of the auditing tasks. It also enables them to view the auditing form submitted by the auditors and download the generated reports that contain the analysis needed.
- The auditors are notified of their auditing tasks and the form is readily available in the portal, so filling out and updating the proof becomes easy and remote. The status of work is communicated to the administrator.

### **3.3. Business Context:**

This portal will help the Infrastructure team conduct effective auditing that in turn aids in the maintenance of the proper infrastructure of our college. The primary target audience includes the Infrastructure team and the auditors decided by the Infra team.

### **3.4. Users:**

- **Admin:** Assigns auditing tasks and follows the progress. Once the task is completed, download the generated report. Gets to see a dashboard of visualizations regarding the task.
- **User:** Here the auditors are the users. They use this platform to be notified of their tasks. Used to upload proof and update the work progress.

## **4. SYSTEM OVERVIEW:**

### **4.1. Considerations:**

- The Username used for login is the official mail ID (bitsathy mail ID)
- The auditor's details are given and updated in the database.
- All the users have access to a good internet connection.

## 4.2. Functional Requirements:

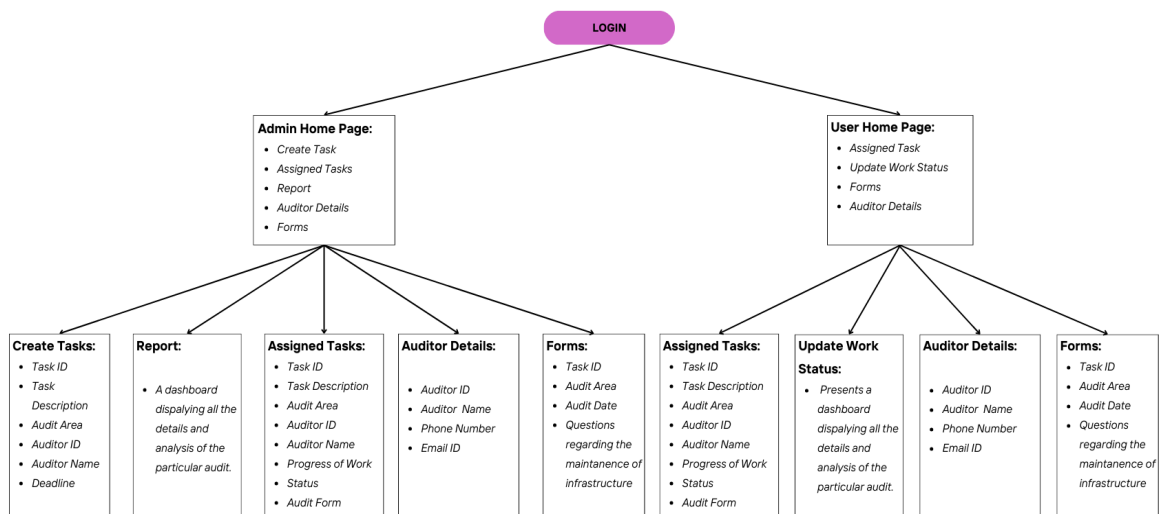
- Auditor Details.
- The task is to be assigned by the admin.
- Details to be filled in by the auditor in the audit form.
- A model to analyze the data and generate the report.

## 4.3. Non Functional Requirements:

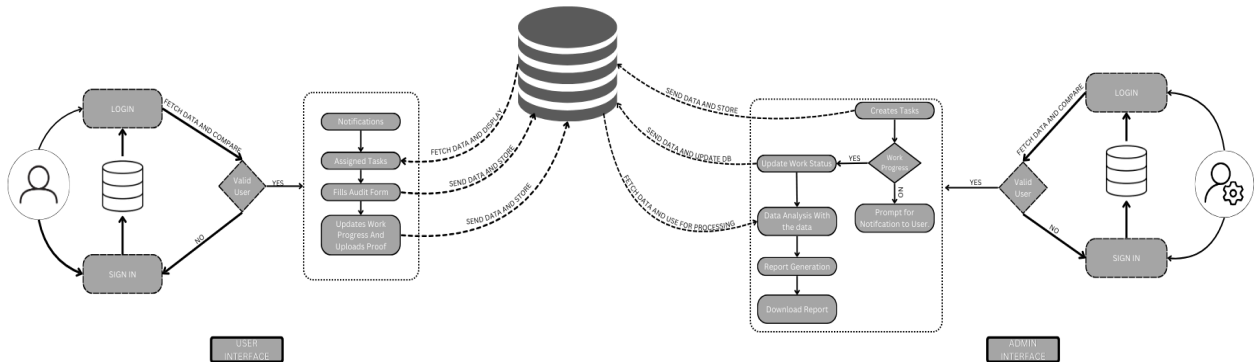
- A portal that has a user-friendly UI and is compatible with any browser.
- The system should have a performance that can process all the data and provide the results in a short time.

## 5. DIAGRAMMATIC REPRESENTATIONS:

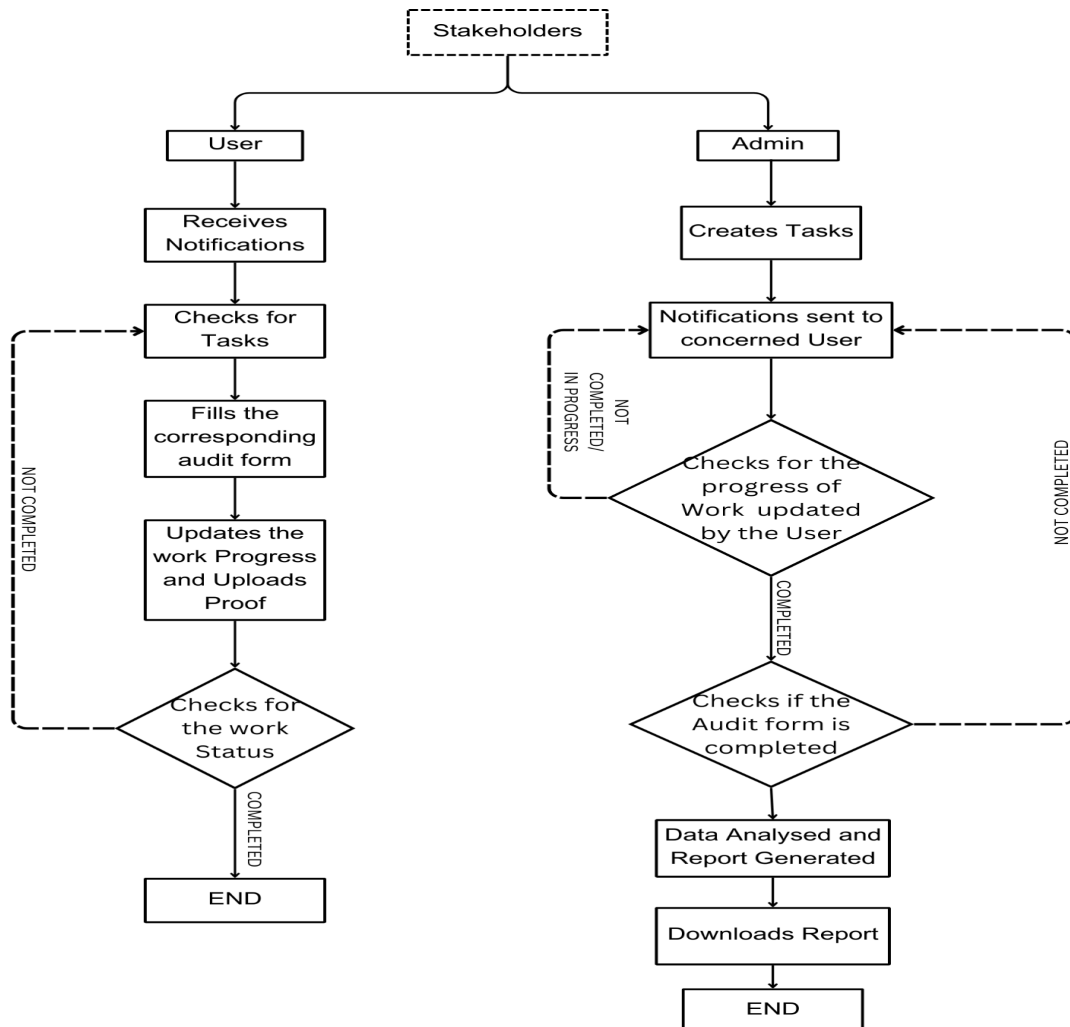
### 5.1. Website Design:



## 5.2. Project Flow:

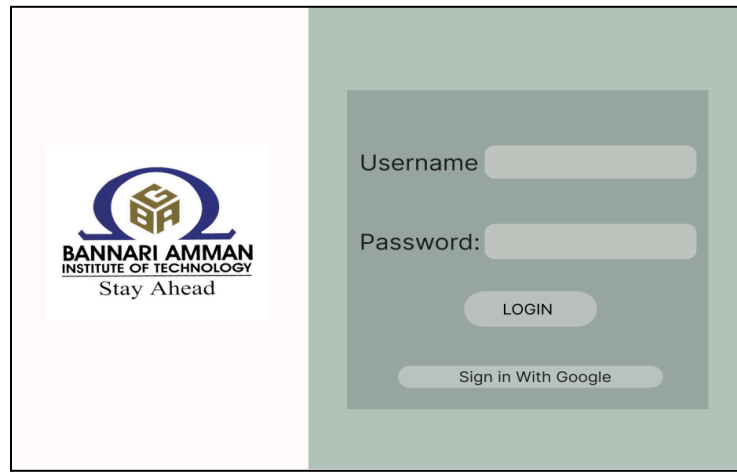


## 5.3. Workflow:



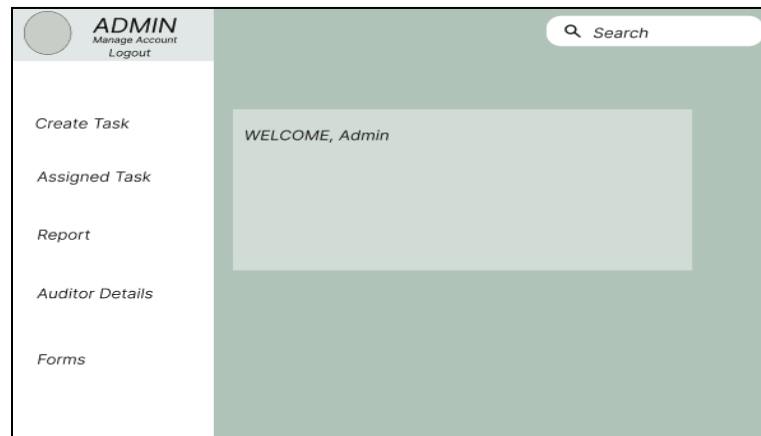
## 6. PROTOTYPE:

### 6.1. Login Page:

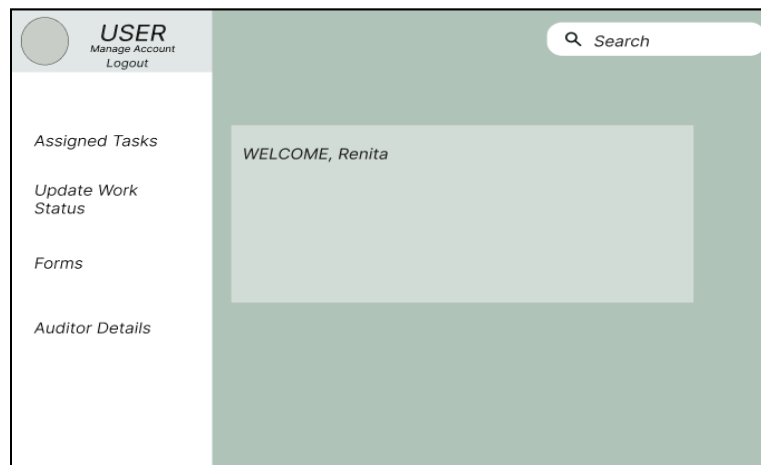


The login page prototype is divided into two main sections. On the left, there is a light pink background containing the Bannari Amman Institute of Technology logo, which features a stylized 'BA' inside a blue circle, with the text 'BANNARI AMMAN INSTITUTE OF TECHNOLOGY' and 'Stay Ahead' below it. On the right, there is a dark green background containing a white login form. The form has two input fields labeled 'Username' and 'Password', a 'LOGIN' button, and a 'Sign in With Google' button.

### 6.2. Admin and User Home Page:



The Admin Home Page prototype features a dark green background. On the left, there is a white sidebar with a header section containing a circular profile icon, the text 'ADMIN', and links for 'Manage Account' and 'Logout'. Below the header, the sidebar lists several menu items: 'Create Task', 'Assigned Task', 'Report', 'Auditor Details', and 'Forms'. On the right, there is a large white rectangular area with the text 'WELCOME, Admin' at the top. In the top right corner of the main content area, there is a search bar with a magnifying glass icon and the text 'Search'.



The User Home Page prototype features a dark green background. On the left, there is a white sidebar with a header section containing a circular profile icon, the text 'USER', and links for 'Manage Account' and 'Logout'. Below the header, the sidebar lists several menu items: 'Assigned Tasks', 'Update Work Status', 'Forms', and 'Auditor Details'. On the right, there is a large white rectangular area with the text 'WELCOME, Renita' at the top. In the top right corner of the main content area, there is a search bar with a magnifying glass icon and the text 'Search'.

### 6.3. Features provided for the Admin:

## CREATE TASK:

Task Id:

Task Description:

Audit Area:

Auditor Id:

Auditor Name:

Deadline:

CREATE TASK

Search

## ASSIGNED TASKS:

TASK ID	TASK DESCRIPTION	AUDITOR ID	AUDITOR NAME	AUDIT AREA	PROGRESS
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The image shows a web application layout. At the top, a teal header bar contains a back arrow icon on the left and a search bar on the right. Below the header, the main content area is divided into two sections. On the left is a light gray sidebar with labels: 'Task ID:', 'Task Description:', 'Audit Area', 'Deadline:', 'Status:', and 'Proof:'. On the right is a larger gray area. The top of this right area has a teal header with the text 'add more contents based on analysis and the req given by admin'. The body of the right area is gray. At the bottom right of the entire interface is a button labeled 'Download as PDF'.

A wireframe design for an auditor details page. The header features a back arrow icon and a search bar labeled "Search". The main title is "AUDITOR DETAILS:". Below the title, there are several labels: "Auditor ID:", "Auditor Name:", "Phone Number:", "Email ID:", "Add.", "Other.", "Contents.", and "Ask Sir.". A rectangular box labeled "Photo" is positioned on the right side of the page.

←

FORMS

Search

Task ID:

Venue:

Date:

Qn No.	Question	Answer	Remarks
1.)	Are the rooms/restrooms clean and free from dust	Yes <input type="checkbox"/> No <input type="checkbox"/>	
2.)	Any Damages In The Furniture?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
3.)	Are The Doors And Handles In Good Condition ?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
4.)	Identify Complaints Of The Following:		
	A.) Civil	Yes <input type="checkbox"/> No <input type="checkbox"/>	
	B.) Carpentry	Yes <input type="checkbox"/> No <input type="checkbox"/>	
	C.) Electrical	Yes <input type="checkbox"/> No <input type="checkbox"/>	
	D.) Plumbing	Yes <input type="checkbox"/> No <input type="checkbox"/>	
5.)	Any Suggestions For Improvement	Yes <input type="checkbox"/> No <input type="checkbox"/>	

Submit

## 6.4. Features provided for the User:

**WORK STATUS**

Task Id:

Auditor Id:

Audit Area:

Progress:

Upload Proof:   
(if progress - completed)

**UPDATE WORK STATUS**

**ASSIGNED TASKS:**

TASK ID	TASK DESCRIPTION	AUDITOR ID	AUDITOR NAME	AUDIT AREA	PROGRESS

**AUDITOR DETAILS:**

Auditor ID:

Auditor Name:

Phone Number:

Email ID:

Photo:

Add Other Contents Ask Sir.

**FORMS**

Task ID:  Venue:

Date:

Qn No.	Question	Answer	Remarks
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D.)	Plumbing	Yes <input type="checkbox"/> No <input type="checkbox"/>	
5.)	Any Suggestions For Improvement	Yes <input type="checkbox"/> No <input type="checkbox"/>	

**Submit**