# BANNARI AMMAN INSTITUTE OF TECHNOLOGY

**An Autonomous Institution Affiliated to Anna University - Chennai, Accredited by NAAC with A+ Grade**

**Sathyamangalam - 638401 Erode District, Tamil Nadu, India**

**Student Name:** KRISHNAN A

**Seat No:** 361

# Project ID: 30

**Project titl**

## Technical Components

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| **Component** | **Tech Stack** |
| Backend |  |
| Frontend | React j |
| Database | PostgreSQL |
| API | RESTful services |

**Implementation Timeline**

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| --- | --- | --- | --- |
| **Phase** | **Deadline** | **Status** | **Notes** |
| Stage 1 | 04/07/2024 | In progress | Planning and Requirement gathering |
| Stage 2 |  |  | Design and Prototyping |
| Stage 3 |  |  | DB Designing |
| Stage 4 |  |  | Backend Implementation |
| Stage 5 |  |  | Testing & Implementation |

**PROBLEM STATEMENT:**

The current practice of faculty members manually managing final year project selection processes is inefficient and prone to duplication of effort. Existing solutions like Google Forms might not adequately address the unique challenges faced by faculty in this context.

* **Duplication of Work:** Faculty often spend significant time creating and managing project proposals or forms individually. This leads to repeated creation of similar content across different departments creates redundancy and reduces faculty time for other crucial tasks. Manual systems might struggle to maintain consistent project information across different departments.
* **Limited Project Visibility:** With decentralized information, students might not be readily aware of the full range of project options available across departments. This can lead to choose projects based on limited information, potentially missing out on more suitable opportunities.
* **Difficulty Preventing Duplication:** Using generic solutions like Google Forms doesn't offer functionalities to prevent multiple teams from selecting the same project. This can lead to Conflicting project assignmentsIf multiple teams choose the same project unknowingly, it can cause confusion and require faculty intervention to resolve.
* **Faculty Burden:** Faculty members might need to manually track project selections and resolve conflicts, adding to their workload.

**PROJECT-FLOW:**

**Purpose:**

To develop a centralized, web-based platform that streamlines and optimizes the final year project selection process for both faculty and students by eliminating duplicate project selection.

## Scope:

This system includes user authentication, a real-time dashboard for selecting projects and check whether the guide approved their project or not. It integrates with existing email systems to send an email to the faculty as a team selected them as a guide.

## Business Context:

The centralized web-based system is aimed at optimizes the final year project selection process and prevent duplicate project selections for students, thus boosting organizational efficiency by minimizing faculty workload. Primary stakeholders include students, faculty, administrative staff, and the IT department.

**System Overview:**

**Users:**

**Students:**

* Submit project proposals with a chosen guide.
* View application status on their dashboard (approved/rejected/pending).

**Faculty:**

* Receive notification emails for project guide requests.
* Review proposals and approve or reject them.

**Admins:**

* Manage the entire system with full CRUD (Create, Read, Update, Delete) access to project data. This allows them to modify project titles, assigned guides, or other relevant information.

**Features:**

**1. Login and registration:**

Students can register for an account or login with their existing

account

**2. Project Application Submission:**

Team Leader can input relevant details regarding their project application including project title, project guide name, project cluster, guide id and any necessary attachments. Upon completion, the application is submitted to the admin interface for review and further processing

**3. Application Status:**

Students can view the current status of their application by the student’s dashboard.

**5. Admin Access:**

Admin can Manage the entire system with full CRUD (Create, Read, Update, Delete) access to project data. This allows them to modify project titles, assigned guides, or other relevant information.

**6. Admin’s Analytical Dashboard:**

Admin can view the number of projects by category, approved and rejected by the faculties.

## FLOW CHART: ER DIAGRAM (DB DESIGN):

