# Software Requirement Specification for S8 Project Review Portal

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| **Project ID** | **27** |
| **Problem Statement** | **S8 Project follow-up and project review conduction and report collection** |
| **Seat Number** | **151** |

## 1. Introduction:

### 1.1 Purpose:

This document aims to provide a thorough overview of the S8 Project Review Portal. The document will elucidate the objectives and characteristics of the system, as well as its interfaces, functionalities, operational limitations, and response to external stimuli.

### 1.2 Scope of Project:

- The system aims to facilitate the placement process by allowing students to select their project topics according to their clusters while providing Administrators with comprehensive tools to manage and analyze project selection data effectively..
- The system implements role-based access control to ensure data security and privacy.
- Students have access only to their own project selection portal through the student dashboard.

- Administrators have access to all the students' project selection data and administrative functions through the administrator dashboard.
- Students have their priority of choosing their own projects or assigned by their project guides.

## 2.System Overview:

### 2.1 Users:

### 1. Students:

Students update their name along with the department and their project title will be determined based on their cluster. Only the team leader will have the access to select their project title and the project ID will be autofilled and vice versa and the same will get updated in the dashboard of the team members.

### 2. Faculty:

Once the student has selected their project title and their project Guides the concerned guide should approve the request and update their student’s progress in the faculty dashboard consistently.

### 3. Admins:

Admins should have the access to all student’s dashboard and be able to review and verify the details given by the students and also have the access to view the status of the guide approval and should be able to download the data as Excel sheet.

### 2.2 Features:

### 1. Login:

Students can  login with their existing account.

### 2. Project Title Selection:

Students can select their project title with certain criteria with the choice of whether they can do projects on the project titles provided by their guides or their own topics / industry requirements in case they get placed.

### 3. Application Status:

Students can view the current status of their application and also see the history logs in the option Activity.

### 4. Admin Access:

Administrators have access to a comprehensive dashboard with tools for managing and analyzing project data.

## 3. System Requirements Specification:

## 3.1 Functional Requirements:

**User Management:**

Students can login using their existing account.Admins have access control with an analytical dashboard and dedicated features.

**Student access:**

Only the team leader has access to update their team details which includes team members name, department category of their project and choice of their project title and project ID must get autofill and vice versa and same will get updated in the team member dashboard with view access.

**Unique Title Management:**

Once the title gets chosen by a it should be disabled for all others and the title will be displayed only based on their clusters to maintain the uniqueness and innovation of the projects.

**Notifications:**

If a student has selected a project title it should be notified to the concerned guide regarding their approval pending. And if the guide has approved the concerned students must be notified regarding their approval status.

**Clusters:**

Project titles were collected from different department faculties and departments were divided into six clusters and students can choose their titles only based on their home clusters. At Least one student in a team should belong to the concerned cluster for choosing the title.

## 3.2 Non - Functional Requirements:

**Performance :**

The platform features a user-friendly interface designed for easy navigation and interaction for both students and administrators.

**Scalability :**

The system is scalable to accommodate a growing number of students and placements over time.

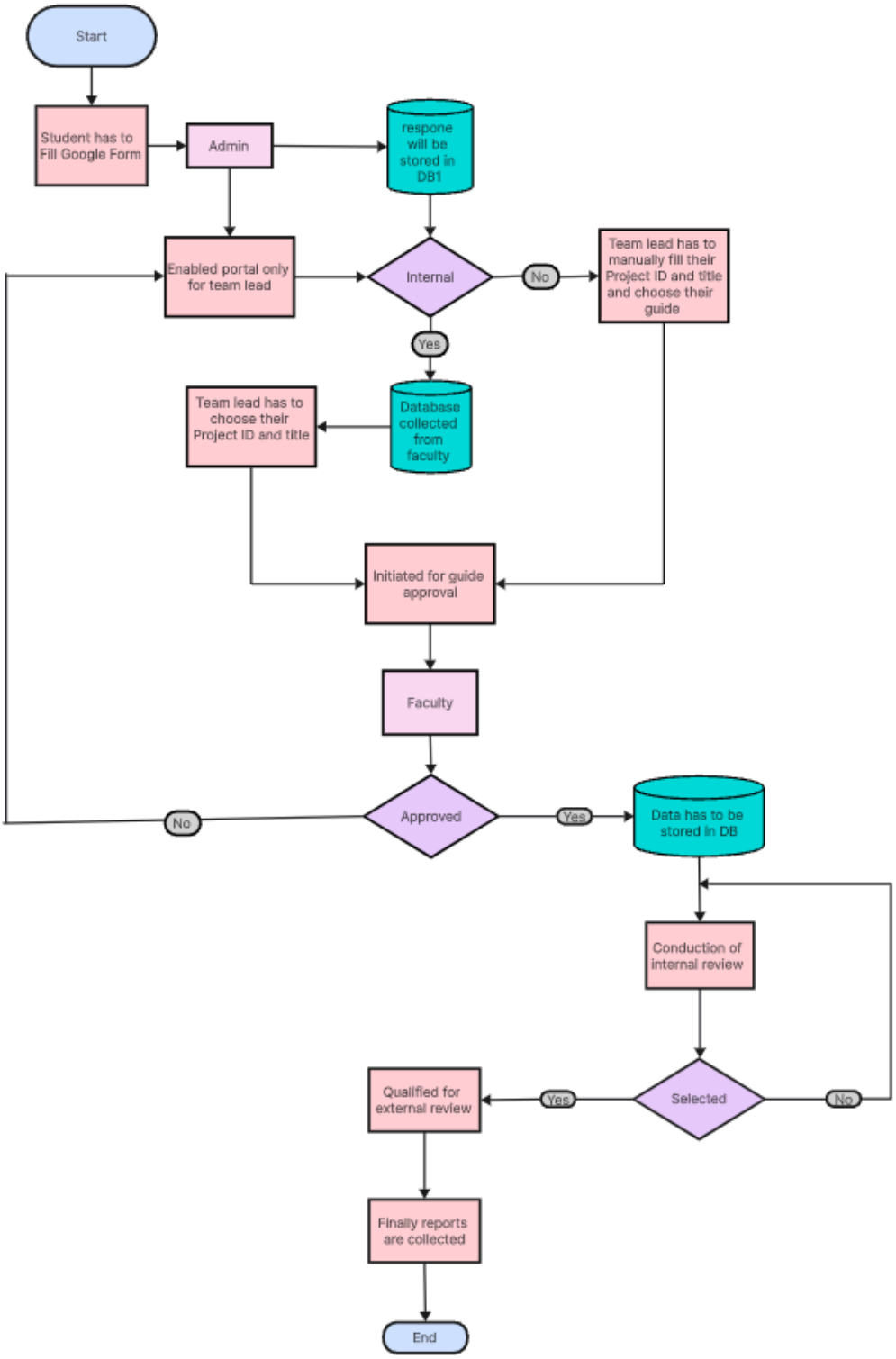
**Security and Access Control:**

1. The PDF generation and data export functionalities are accessible only to authorized administrators.
2. Role-based access control ensures that only admins with appropriate permissions can perform these actions.

**Error Handling and Validation:**

1. The system includes error handling mechanisms to address any issues that may arise during PDF generation or data export.
2. It performs validation checks to ensure that the exported data is accurate and complete.

## FLOWCHART:


Start
Student has to Fill Google Form
Admin
respone will be stored in DB1
Enabled portal only for team lead
Internal
No
Team lead has to manually fill their Project ID and title and choose their guide
Yes
Team lead has to choose their Project ID and title
Database collected from faculty
Initiated for guide approval
Faculty
Approved
No
Yes
Data has to be stored in DB
Conduction of internal review
Selected
Yes
No
Qualified for external review
Finally reports are collected
End

## ABOUT THE STACK:

**STACK : MERN Stack**

**FRONTEND : React (JS Library for building user interfaces)**

**BACKEND : Node.js with Express.js**

**DATABASE : MongoDB(NOSQL Database)**

**API : OpenAPI**