Requirements Specification Document

Title: Invention Management System (IMS)

Team no : 2

Team Members

1. Adithyan Rajesh

2. Hariprid V

3. Pranav R Menon

4. Sreyas A

1. Project Summary

1.1 Project Overview

The Invention Management System (IMS) is a university-level web application for managing invention ideas. Developed for the Database Management Systems and User Interface Design coursework at Amrita University, it enables students to submit ideas, faculty to review them, and admins to oversee all operations. The system uses a modern tech stack including React.js, Express.js, and PostgreSQL, with responsive design using Bootstrap.

1.2 Project Scope

The IMS allows for:
- Secure login for students, faculty, and admins
- Invention submission and editing by students
- Review and approval process by faculty
- System monitoring and role control by admins
- Notifications for review actions
- Fully responsive design
- Backend and frontend integration using RESTful APIs
- PostgreSQL for data persistence

2.0 General Description

2.1 Product Functions Overview

Types of users/actors:

1. Admin

2. Faculty (Reviewer)

3. Student (Inventor)

Admin Features
- Add/remove faculty and students
- Assign invention submissions to reviewers
- Monitor all system activities
- Modify invention statuses and manage roles

Faculty Features
- Review assigned inventions
- Comment and suggest changes
- Approve or reject submissions
- View review history

Student Features
- Register and log in
- Submit, edit, and view inventions
- Track invention status
- Receive notifications of updates

Team Member Feature Ownership

Feature	Member
Authentication & JWT Setup	Sreyas A
Invention Submission Module	Pranav R Menon
Review & Comment System	Hariprid V
Admin Dashboard & Controls	Adithyan Rajesh

User Interface

User Interface Design (Visual layout of the elements that a user interacts with in a website using paper and pencil/pen. Scan and upload to the same document.)