Software Requirements and Design Document

For

Group 7

Version 1.0

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Overview
We are developing a task management web application using the MERN stack. The application will enable users to manage personal and team tasks, collaborate within organizations, and track tasks via a calendar feature. It will include role-based permissions for administrators to manage users and tasks.

Functional Requirements

1. User registration and login system – *High priority*
2. Task creation, editing, and deletion – *High priority*
3. Role-based access control for administrators and regular users – *High priority*
4. Calendar integration to track task deadlines – *Medium priority*
5. Ability for users to mark tasks as complete or incomplete – *High priority*

Non-Functional Requirements

1. Application must be responsive and work on multiple devices – *High priority*
2. User data must be securely stored, with encrypted login credentials – *High priority*
3. The system must support up to 1000 users per organization – *Low priority*

Use Case Diagram
No need to include textual descriptions for Increment 1.

Class Diagram / Sequence Diagrams

Operating Environment
The software will operate on web browsers and mobile devices. It will be built using React (frontend) and Node.js (backend) on MongoDB Atlas (cloud-based).

Assumptions and Dependencies

- We assume that MongoDB Atlas will be reliable and scalable.
- We depend on third-party libraries for features like authentication (JWT) and calendar integration (FullCalendar).