**Task Management Application Documentation**

**Project Overview**

**Project Title: Task Management System**

**Description:**

A Task Management System designed to help teams organize and manage tasks effectively. It allows users to create tasks, assign them to specific team members, group tasks by different teams, track task progress, and more. This system also supports user authentication, group management, and notifications to keep everyone on track.

**Features:**

1. **User Authentication**:
   * Register, Login, and Logout.
   * Roles (Admin, User) to manage permissions.
2. **Task Creation & Assignment**:
   * Create tasks with title, description, priority, and due date.
   * Assign tasks to specific users or groups.
   * Mark tasks as completed or in-progress.
3. **Group Management**:
   * Create groups (e.g., Development, Marketing).
   * Add users to groups.
   * Assign tasks to specific groups or users within the group.
4. **Task Progress Tracking**:
   * Track task progress (Not Started, In Progress, Completed).
5. **User Dashboard**:
   * View all tasks assigned to the logged-in user.
   * Filter tasks by status, priority, or deadline.
6. **Search & Filters**:
   * Search for tasks by title or description.
   * Filter tasks by group, priority, or status.
7. **Task Notifications**:
   * Notify users when they are assigned tasks or when a task's status is updated.

**Tech Stack**

* **Frontend**:
  + **React.js** (for building the user interface).
  + **React Router** (for routing and navigation).
  + **Material UI** or **Styled-components** (for styling).
  + **Axios** (for API requests).
* **Backend**:
  + **Node.js with Express** (for building the API).
  + **MongoDB** (for database storage).
  + **Mongoose** (for MongoDB interaction).
  + **JWT (JSON Web Tokens)** (for authentication).
* **Development Tools**:
  + **VSCode** or any preferred code editor.
  + **Postman** (for testing API endpoints).
  + **Git** (for version control).
  + **Render/Railway/Vercel** (for deployment).

**Deadline :**

Deadline of the Project will be by 1st of March , 2025.

Ansh Infotech.