

# Task Manager

## functional requirements:

### 1. User Registration and Authentication:

- Users should be able to register and create an account.
- Users should be able to log in securely using their credentials.
- Users should be able to reset their passwords if forgotten.

### 2. Task Creation and Management Allow users to:

- Create tasks with titles, descriptions, due dates, priorities, and categories.
- Enable them to edit, delete , and mark tasks as complete.
- Recurring Tasks: allow users to create tasks that repeat at specific intervals, such as daily, weekly, monthly, or custom recurrence patterns.
- Tags and Labels: implement a system for users to categorize and label tasks using tags or labels.

### 3. Reminders and Notifications:

- Implement a reminder system that sends notifications to users for upcoming tasks and deadlines. Users should have the ability to customize the timing and frequency of reminders.

### 4. Task Prioritization:

- Allow users to assign priorities to their tasks, such as high, medium, or low. Implement sorting and filtering options to view tasks based on priority levels.

### 5. Task Dependencies:

- Enable users to link tasks together and define dependencies.

### 6. Task Assignment and Collaboration:

- Provide the ability to assign tasks to specific individuals or teams. Implement features that facilitate collaboration, such as task comments, file attachments, and real-time updates.

### 7. Task Notes and Attachments:

- Enable users to add additional notes or descriptions to tasks. Allow attachments of files or links related to the task, such as documents or web resources.

## **8. Progress Tracking:**

- Provide users with the ability to track the progress of their tasks. This can be done through status updates, progress percentages, or visual indicators, giving users a clear view of their task completion.

## **9. Data Export:**

- Allow users to export their task data in various formats, such as CSV or PDF.

## **Non-functional Requirements:**

### **1. Performance:**

- The system should be able to handle a large number of tasks and users without significant performance degradation.
- The response time for user interactions should be fast and efficient.

### **2. Security:**

- User authentication and data transmission should be secure.
- User data should be protected from unauthorized access.

### **3. Usability:**

- The user interface should be intuitive and easy to navigate.
- Users should be able to quickly learn and understand the features and functionalities of the task manager.
- The system should provide clear and meaningful error messages to assist users in troubleshooting.