---------------------- Project Requirement -----------------------

Creating a comprehensive project requirement document for a Task Tracker involves outlining the key functionalities, features, and user interactions expected from the application. Below is a detailed project requirement for your Task Tracker application:

### 1. Introduction

\*\*Objective\*\*: Develop a Task Tracker application to assist users in managing their tasks efficiently, focusing on categorization (e.g., Home, Work), prioritization (Urgent, Important), and planning (Do now, later, postpone, set a deadline).

### 2. User Requirements

#### 2.1 User Roles:

- \*\*End-Users\*\*: Individuals seeking to organize their tasks based on various criteria such as type, urgency, and importance.

- \*\*Administrators\*\*: Users with permissions to manage user accounts and oversee application settings.

#### 2.2 Functional Requirements:

1. \*\*Task Management\*\*

- \*\*Creation\*\*: Users can create tasks, specifying details such as title, description, category (Home, Work, etc.), urgency, importance, and deadlines.

- \*\*Viewing\*\*: Users can view their tasks in various formats, including lists or calendars, filtered by categories, deadlines, and priorities.

- \*\*Updating\*\*: Users can update tasks' details, including changing status, re-categorizing, and adjusting urgency/importance levels.

- \*\*Deletion\*\*: Users can delete tasks that are no longer relevant.

2. \*\*Task Categorization\*\*

- Users can categorize tasks into predefined categories such as Home, Work, etc., or create custom categories.

3. \*\*Task Prioritization\*\*

- Tasks can be marked as Urgent, Important, both, or neither, assisting in prioritization.

4. \*\*Task Planning\*\*

- Users can decide on actions for each task: Do now, Do later, Postpone, or Set a specific deadline.

5. \*\*Notifications\*\*

- The system will send reminders based on the urgency, importance, and deadlines associated with each task.

6. \*\*Reporting\*\*

- Users can generate reports summarizing their tasks' statuses, categories, and compliance with planned actions and deadlines.

### 3. Non-functional Requirements

1. \*\*Usability\*\*: The interface should be user-friendly, allowing users to navigate and manage tasks efficiently.

2. \*\*Performance\*\*: The application should handle multiple tasks seamlessly and provide quick access to tasks and categories.

3. \*\*Scalability\*\*: The system should be scalable to accommodate an increasing number of tasks and users.

4. \*\*Security\*\*: User data should be securely stored, with authentication mechanisms in place for user access.

### 4. System Requirements

1. \*\*Front-End\*\*: A responsive web or mobile interface for task management, supporting various devices and screen sizes.

2. \*\*Back-End\*\*: A server to manage user data, task details, notifications, and reports.

3. \*\*Database\*\*: A relational or NoSQL database to store user accounts, task details, categories, and actions.

4. \*\*Integration\*\*: Capability to integrate with email or SMS services for sending notifications.

### 5. Data Model

1. \*\*User Table\*\*: Stores user account information, including credentials and settings.

2. \*\*Task Table\*\*: Contains task details such as title, description, category, urgency, importance, status, and deadlines.

3. \*\*Category Table\*\*: Manages predefined and custom categories for tasks.

4. \*\*Action Table\*\*: Logs actions taken on tasks (Do now, later, postpone, deadline).

This document outlines the basic structure for the Task Tracker application, focusing on user needs and system capabilities. Adjustments and enhancements may be required based on user feedback and further development phases.

----------------- User stories and journeys ------------------------

Based on the project requirements provided for the Task Tracker application, I will outline a series of user stories and a user journey to help visualize how different users will interact with the application. This approach will facilitate a user-centered design and development process, ensuring the application meets the needs of its target audience.

### User Stories

#### End-Users

1. \*\*Task Creation\*\*

- As an end-user, I want to create tasks with titles, descriptions, categories, urgencies, importances, and deadlines so that I can organize my tasks effectively.

2. \*\*Task Viewing\*\*

- As an end-user, I want to view my tasks in list or calendar formats and filter them by categories, deadlines, and priorities to easily find what I'm looking for.

3. \*\*Task Updating\*\*

- As an end-user, I want to update my tasks' details, including status, category, urgency, and importance levels, to reflect changes in my priorities or plans.

4. \*\*Task Deletion\*\*

- As an end-user, I want to delete tasks that are no longer relevant to keep my task list current and manageable.

5. \*\*Task Categorization\*\*

- As an end-user, I want to categorize my tasks into predefined or custom categories to better organize my workload.

6. \*\*Task Prioritization\*\*

- As an end-user, I want to mark tasks as Urgent, Important, both, or neither to prioritize my tasks according to their urgency and importance.

7. \*\*Task Planning\*\*

- As an end-user, I want to set actions for my tasks, such as Do now, Do later, Postpone, or Set a deadline, to plan my workload effectively.

8. \*\*Receive Notifications\*\*

- As an end-user, I want to receive notifications based on the urgency, importance, and deadlines of my tasks so that I don't miss any important tasks or deadlines.

9. \*\*Generate Reports\*\*

- As an end-user, I want to generate reports summarizing my tasks' statuses, categories, and compliance with planned actions and deadlines to review my productivity and task management efficiency.

#### Administrators

10. \*\*Manage User Accounts\*\*

- As an administrator, I want to manage user accounts, including creating, updating, and deleting accounts, to ensure proper access and usage of the application.

11. \*\*Oversee Application Settings\*\*

- As an administrator, I want to oversee and adjust application settings to ensure the Task Tracker runs smoothly and meets users' needs.

### User Journey

#### Scenario: Jane, an End-User

\*\*Jane's Objective\*\*: Organize her work and personal tasks efficiently using the Task Tracker application.

1. \*\*Signing Up\*\*: Jane signs up for the Task Tracker application, providing her email and creating a password. She is then taken through a quick tutorial on how to use the app.

2. \*\*Creating Tasks\*\*: Jane starts by creating tasks for the day. She creates a "Work" category for her professional tasks and a "Home" category for personal tasks. She marks an urgent work report as "Urgent" and "Important" and sets a deadline for today.

3. \*\*Viewing and Planning\*\*: After entering her tasks, Jane views them in the list format and decides to plan her day. She marks the urgent report as "Do now" and a grocery shopping task as "Do later."

4. \*\*Receiving Notifications\*\*: Throughout the day, Jane receives notifications reminding her of her upcoming deadlines, helping her stay on track.

5. \*\*Updating Tasks\*\*: After completing her report, Jane updates the task status to "Completed" and decides to postpone the grocery shopping to the next day.

6. \*\*End of Day Review\*\*: At the end of the day, Jane reviews her tasks and generates a report to see her accomplishments and the tasks pending for the next day. She feels satisfied with her productivity and the ease of managing her tasks through the Task Tracker application.

This user journey illustrates how Jane, an end-user, interacts with the Task Tracker application from signing up to reviewing her tasks at the end of the day, showcasing the application's features and benefits in a real-world scenario.