2. To-Do List

Description:

A simple API for managing tasks in a to-do list application. Users can create, update, view, and delete tasks. The API does not require authentication and allows interaction with basic task data.

Core Features:

Task Management:

- `GET /tasks`: Retrieve a list of all tasks.
- `POST /tasks`: Create a new task (e.g., add title, description, and due date).
- `GET /tasks/{id}`: Retrieve a specific task by its ID.
- `PUT /tasks/{id}`: Update the details of an existing task (e.g., mark as completed, change due date).
- `DELETE /tasks/{id}`: Delete a specific task from the list.

Task Status:

- `PUT /tasks/{id}/complete`: Mark a task as completed.
- `PUT /tasks/{id}/incomplete`: Mark a task as incomplete.

Filtering Tasks:

- `GET /tasks?completed=true`: Retrieve all completed tasks.
- `GET /tasks?completed=false`: Retrieve all incomplete tasks.
- `GET /tasks?due_date={YYYY-MM-DD}`: Get tasks that are due on a specific date.

Task Priorities:

- `GET /tasks?priority={priority_level}`: Filter tasks by priority (e.g., low, medium, high).
- `PUT /tasks/{id}/priority`: Update the priority level of a task.

Sample Use Cases:

1. **Simple Task Management Apps**:
   o Users can manage their personal to-do lists with basic functionalities like task creation, updating, and deleting.
2. **Project Management**:

- Track project tasks and deadlines by creating, updating, and filtering tasks based on due dates or completion status.
3. **Personal Organization**:
    - A lightweight task management tool that allows users to keep track of everyday activities, like shopping lists or reminders.