Algo Root

Overview

As a Full-Stack Developer Intern, your objective is to design and implement a **Task Management**, a web application that enables users to manage tasks. This task is expected to be completed within 2 days, demonstrating your ability to develop both frontend and backend components efficiently while following best practices.

Key Features

1. **Task Management :**

   ○ **Task Management:** Implement functionality to create, edit, delete, and mark tasks as completed.

2. **Backend API Development:**

   ○ **Tech Stack:** Utilize Node.js with Express or any other backend framework of your choice.
   ○ **API Endpoints:**
      ■ **GET /tasks:** Retrieve all tasks.
      ■ **POST /tasks:** Create a new task.
      ■ **PUT /tasks/:id:** Update an existing task (e.g., mark as completed or modify details).
      ■ **DELETE /tasks/:id:** Remove a task.
   ○ **Error Handling:** Implement proper HTTP status codes and messages for common issues (e.g., validation failures, missing resources).
3. **Data Persistence:**

○ **Storage Options:** Choose an appropriate data storage mechanism, such as an in-memory store, file-based JSON storage, SQLite, or another database.

Data Model Details

Below is a suggested schema for task and activity management:

● **Task Model:**

  ○ **id:** Unique identifier (string or number).
  ○ **title:** Brief description of the task.
  ○ **description:** (Optional) Detailed information about the task.
  ○ **completed:** Boolean flag indicating task status.

Implementation Guidelines

● **Frontend Development:** You have full flexibility in designing the UI using any frontend framework (React/ Next js). The focus should be on functionality, not aesthetics.
● **Code Quality:** Follow best practices for modularity, readability, and maintainability. Ensure adequate documentation within your code.
● **API Documentation:** Include a README file detailing:
  ○ Installation steps and setup instructions.
  ○ API endpoints with request/response formats.
  ○ Instructions for testing the API using Postman, curl, or any other tool.
  ○ **Screenshots** showcasing the UI.

This assignment serves as a practical demonstration of your full-stack development capabilities, problem-solving skills, and ability to implement a structured and efficient solution. Focus on delivering a functional, well-documented, and maintainable application within the given timeframe.

Important Note:

Submit the Github url and using the Google Form provided below (Make sure your live url is present in your github repo):

https://docs.google.com/forms/d/1wygUvF5lRxvS3R4XTmofuEwjAx_oYqbCUtTvQ2R5KWc/viewform?edit_requested=true