

Angular Assignment: Task Management Application

Develop a simple Task Management Application using Angular.

This app should allow users to create, read, update, and delete tasks. Additionally, it should fetch and display some data from an external API.

Requirements:

1. Project Setup:

- Set up a new Angular project.
- Use Angular CLI to create necessary components, services, and modules.

2. Components:

- **Header Component:** Displays the title of the application.
- **Task List Component:** Shows a list of tasks.
- **Task Item Component:** Displays individual task details with options to edit and delete.
- **Add Task Component:** Form to add a new task.

3. Services:

- **Task Service:** Manages task data (CRUD operations).
- **API Service:** Fetches data from an external API (e.g., weather data, quotes, or any other public API).

4. Functionality:

- **Add Task:** Users should be able to add new tasks with a title and description.
- **View Tasks:** Display the list of tasks.
- **Edit Task:** Users should be able to edit the task details.
- **Delete Task:** Users should be able to delete a task.
- **API Integration:** Display data fetched from an external API on the UI (e.g., show a random quote or weather info on the header).

5. UI/UX:

- Use Angular Material for styling.
- Ensure a responsive and user-friendly interface.
- Implement form validations (e.g., required fields, max length).

6. Routing:

- Implement basic routing to navigate between different components (e.g., Task List and Add Task).

7. **Optional Enhancements:**

- Implement search functionality to filter tasks.
- Add a confirmation dialog before deleting a task.
- Implement pagination if the task list grows long.

Deliverables:

Source Code: Submit the complete source code with clear comments and structure.

Documentation: Provide a brief documentation explaining the project structure, how to run the application, and any other relevant details.

Demo: A short video or live demo showcasing the functionality of the application.

Day-wise Breakdown:

Day 1:

- Set up the Angular project and install necessary dependencies.
- Create the basic components (Header, Task List, Task Item, Add Task).
- Set up routing between components.
- Implement the Task Service and define the task model.

Day 2:

- Develop the Add Task form with validations.
- Implement the logic to add, edit, and delete tasks.
- Create the UI for the Task List and Task Item components.
- Integrate Angular Material or Bootstrap for styling.

Day 3:

- Implement the API Service and fetch data from an external API.
- Display the fetched data on the UI (e.g., in the Header component).
- Test the application for functionality and fix any bugs.
- Prepare the documentation and demo video.