## **Hackathon Assignment: Event Management Dashboard**

### **Problem Statement**

Organizations often struggle to organize and manage events efficiently. As part of this hackathon, you are required to develop a web-based Event Management Dashboard to streamline the process of creating events, assigning tasks, and tracking progress.

The application should allow users to:

- 1. Manage events (CRUD operations).
- 2. Manage attendees and assign them tasks.
- 3. Track tasks related to events with progress visualization.

# Requirements

## 1. Frontend Development

You need to create a user-friendly and responsive dashboard with the following pages/features:

- Event Management Page:
  - o Display a list of all events with options to add, edit, and delete events.
  - Each event should display details like name, description, location, and date.
- Attendee Management Page:
  - View the list of attendees.
  - Add or remove attendees.
  - Assign attendees to specific events or tasks.
- Task Tracker Page:
  - Display tasks associated with each event.
  - Allow users to update task status (Pending/Completed).

### **UI** Guidelines

- The interface must be intuitive and user-friendly.
- Ensure the design is responsive (works on both mobile and desktop devices).
- Provide form validation (e.g., no empty fields when adding an event or attendee).

# 2. Backend Development

Develop RESTful APIs to support the frontend functionality. The APIs must include:

# 1. Event Management API:

- Create an Event
- Get all Events
- Update an Event
- Delete an Event

# 2. Attendee Management API:

- Add an Attendee
- Get all Attendees
- Delete an Attendee

# 3. Task Management API:

- Create a Task
- Get Tasks for an Event
- Update Task Status

# 3. Integration

- 1. Integrate the frontend with the backend APIs to fetch and display real-time data.
- 2. Ensure smooth user interactions, such as:
  - Displaying success/error messages for API calls.
  - Loading indicators while waiting for API responses.

#### Constraints

- 1. Each event should have:
  - Name, description, location, date, and a list of attendees.
- 2. Each task should have:
  - Name, deadline, status (Pending/Completed), and the assigned attendee.
- 3. Form inputs must be validated (e.g., no empty fields, valid dates).

#### **Bonus Points**

- 1. Add authentication (login/logout) for accessing the dashboard.
- 2. Show progress using a visual indicator (e.g., progress bar) based on task completion (Task Tracker Page).
- 3. Implement a calendar view for displaying events visually.
- 4. Integrate real-time updates (e.g., using WebSockets) to show task progress dynamically.

### **Deliverables**

- 1. Complete source code of the project (GitHub repository link).
- 2. A short presentation/demo to explain your application.
- 3. Documentation that includes:
  - o Instructions to set up and run the project.
  - Details of the APIs developed.

**Instructions**: After completing the project, create a repository in your GitHub account and push your code to it. Add the provided email as a collaborator to review your code.

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