

Assignment: Dynamic Calendar Application

Assignment by Affworld FZ LLC

Objective:

Develop a dynamic calendar application using FastAPI, MongoDB, and Vite.js. The calendar should support day, week, and month views, and allow users to create and view scheduled meetings/tasks.

Tech Stack:

- Backend: FastAPI
- Database: MongoDB
- Frontend: Vite.js

Requirements:

1. Dynamic Calendar Views:

- Implement a calendar with three different views:
 - Day View: Display all events for a specific day.
 - Week View: Display all events for a specific week.
 - Month View: Display all events for a specific month.
- Users should be able to switch between these views seamlessly.

2. Event Scheduling:

- Allow users to create, update, and delete events.
- When creating an event, users should be able to select a specific date and time.
- Each event should have a title, description, and duration.

3. Event Display:

- Display all scheduled events/tasks in the calendar view.
- Ensure that events are visually distinguishable and correctly aligned based on their time and duration.
- When viewing a particular date (in any view), all events scheduled for that date should be visible.

4. Backend Functionality:

- Set up a FastAPI backend to handle API requests related to event management (e.g., creating, updating, deleting, fetching events).
- Use MongoDB to store event data, including the event's title, description, date, time, and duration.

5. Frontend Functionality:

- Use Vite.js to create a responsive and interactive frontend.
- Integrate the calendar UI with the backend to fetch and display events dynamically.

6. Additional Features (Optional for Extra Credit):

- Implement recurring events (e.g., weekly team meetings).
- Add event reminders (notifications).
- Enable drag-and-drop functionality for rescheduling events.

Submission Guidelines:

- Provide a link to the GitHub repository containing your project code.
- Ensure your project includes clear instructions on how to set up and run the application locally.
- Submit a video demonstration (2-3 minutes) showcasing the application's functionality, specifically focusing on creating and viewing events across different calendar views.

Resources:

- Video Tutorial Link (Use the video provided to understand the exact functionality required).
- FastAPI Documentation: <https://fastapi.tiangolo.com/>
- MongoDB Documentation: <https://docs.mongodb.com/>
- Vite.js Documentation: <https://vitejs.dev/>

Evaluation Criteria:

- Functionality: How well the calendar meets the requirements (views, event creation, etc.).
- Code Quality: Cleanliness, organization, and comments in the code.
- User Interface: Usability and design of the calendar interface.
- Documentation: Clarity of setup instructions and code comments.
- Bonus Points: Implementation of additional features (e.g., recurring events, reminders).

Submission Form:

<https://forms.gle/XtPA9Pz7u56SukHu8>