

Objective:

Build a meeting scheduling web application using Node.js, Next.js, and MySQL. The application should allow users to set up meetings by selecting a date and time. No two meetings should be scheduled at the same time.

Requirements:

1. User Interface:

- **Calendar View:** Implement a calendar where users can select a specific day.
- **Meeting Display:** Upon selecting a day, the meetings scheduled for that day should be displayed on the right side of the calendar.
- **Meeting Creation:** Provide an interface to schedule a new meeting by selecting a date and time.

2. Functionality:

- **Unique Meeting Times:** Ensure no two meetings overlap. If a user attempts to schedule a meeting at a time that conflicts with an existing meeting, they should receive an appropriate error message.
- **Meeting Details:** Each meeting should have a title and description.

3. Backend:

- **API Endpoints:** Create RESTful API endpoints to manage meetings (create, read, update, delete).
- **Database:** Use MySQL to store meeting information. Design the database schema to efficiently manage meeting data.

4. Technology Stack:

- **Frontend:** Next.js for the frontend application.
- **Backend:** Node.js with Express.js for building the API.
- **Database:** MySQL for storing meeting information.

5. Bonus:

- Implement authentication and authorization for users.
- Add the ability to edit and delete meetings.
- Implement responsive design for mobile and tablet views.
- Use TypeScript for type safety.

Deliverables:

1. A GitHub repository with the full source code of the application.

2. A README file with instructions on how to set up and run the application.
3. A short video or document explaining the design choices and any trade-offs made.

Evaluation Criteria:

1. **Code Quality:** Clean, readable, and well-documented code.
2. **Functionality:** Meets all the specified requirements.
3. **Design:** Intuitive and user-friendly interface.
4. **Efficiency:** Proper use of resources and efficient database design.
5. **Bonus:** Implementation of additional features listed in the bonus section.

Good luck, and we look forward to seeing your solutions!