

## Assignment for MERN Stack Developer

### Required Stack:

- **Frontend:** React
- **Backend:** Express.js
- **Database:** MongoDB
- **State Management:** Any external library (Redux, Zustand, Recoil, etc.)
- **Timezone Management:** Preferably dayjs or any suitable library

### Assignment Walkthrough (Recording Link) :

<https://www.loom.com/share/5528d6e35a184007a37e222949400279?sid=29d37e93-3098-4bc6-bfe1-429f5c9d25ab>

### Project Overview

Build an **Event Management System** where an admin can create multiple profiles and manage events across multiple users and timezones. where users can view, update, and create events, respecting their selected timezone.

### Functional Requirements

#### **Profiles**

- Admin can create multiple user profiles by entering a name.
- No functionality is required for deleting profiles.

#### **Event Creation**

- Admin (or any user) can create events for one or multiple profiles at the same time.
- Event fields:
  - ☐ Profiles: Select one or more users.
  - ☐ Timezone: Pick a timezone for the event.
  - ☐ Start Date + Time: Calendar + time selector.
  - ☐ End Date + Time: Calendar + time selector.

#### **Rules:**

- End date/time cannot be in the past relative to the selected start date/time.
- Start and end times should respect the selected timezone of the user(s).

### **Event Viewing & Updating**

- Users can view all events assigned to them.
- Users can update all events assigned to them.
- Each event stores:

- ❑ createdAt (timestamp in user timezone)
- ❑ updatedAt (timestamp in user timezone)

### Multi-timezone handling:

- Each user can pick their own timezone.
- All events must display according to the user's selected timezone.
- Updating events should reflect properly across all users' selected timezones.

### Bonus / Extra Credit

#### Event Update Logs:

- Whenever an event is updated, log the change.
- Show previous vs. updated values and the timestamp of the update in the user's selected timezone.
- If a user changes their timezone, all timestamps and logs should automatically convert to the new timezone.

### Submission Requirements

1. Github repo link and Live preview link.
2. Video Link explaining the project and its nuances
3. submit here

<https://docs.google.com/forms/d/e/1FAIpQLSe7zrp9PXTaMo0zyxvOOCTDznlrkR5PuhigErwzXRWQWZjwrA/viewform>

### SNAPSHOTS FOR INSPIRATION

## Event Management

Create and manage events across multiple timezones

Select current profile... ▾

### Create Event

Profiles

Select profiles... ▾

Timezone

Eastern Time (ET) ▾

Start Date & Time

Pick a date

🕒 09:00 🕒

End Date & Time

Pick a date

🕒 09:00 🕒

+ Create Event

### Events

View in Timezone

Eastern Time (ET) ▾

No events found

# Event Management

Create and manage events across multiple timezones

Create Event

Profiles

Select profiles...

Timezone

Eastern Time (ET)

Start Date & Time

Pick a date

🕒

09:00

🕒

End Date & Time

Pick a date

🕒

09:00

🕒

+ Create Event

Events

View in Timezone

Eastern Time (ET)

No events found

anuj

Q Search current profile...

✓ anuj

alpha

beta

Add

# Event Management

Create and manage events across multiple timezones

Create Event

Profiles

2 profiles selected

Q Search profiles...

✓ anuj

✓ alpha

+ Add Profile

End Date & Time

Pick a date

🕒

09:00

🕒

+ Create Event

Events

View in Timezone

Eastern Time (ET)

No events found

anuj

# Event Management

Create and manage events across multiple timezones

anuj

## Create Event

Profiles

2 profiles selected

Timezone

India (IST)

Start Date & Time

October 15th, 2025

09:00

End Date & Time

Pick a date

09:00

October 2025						
Su	Mo	Tu	We	Th	Fr	Sa
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

Create Event

## Events

View in Timezone

Eastern Time (ET)

No events found

# Event Management

Create and manage events across multiple timezones

anuj

## Create Event

Profiles

Select profiles...

Timezone

Eastern Time (ET)

Start Date & Time

Pick a date

09:00

End Date & Time

Pick a date

09:00

+ Create Event

## Events

View in Timezone

Eastern Time (ET)

anuj, alpha

Start: Oct 14, 2025

11:30 PM

End: Oct 16, 2025

11:30 PM

Created: Oct 11, 2025 at 03:56 PM

Updated: Oct 11, 2025 at 03:56 PM

Edit

View Logs

