NCW Event Organizer - Full Development Guide

1. Project Setup

Tech Stack:

- **Frontend:** HTML, CSS, JavaScript (React.js for dynamic UI)
- **Backend:** Node.js, Express.js
- **Database:** Firebase / MongoDB Atlas
- **Hosting:** Netlify (Frontend), Render (Backend)
- **Version Control:** GitHub

Folder Structure:

```
NCW-Event-Organizer/
|-- frontend/
|     |-- public/
|     |     |-- index.html
|     |     |-- images/
|     |-- src/
|     |     |-- components/
|     |     |     |-- Navbar.js
|     |     |     |-- Footer.js
|     |     |     |-- EventCard.js
|     |     |-- pages/
|     |     |     |-- Home.js
|     |     |     |-- Login.js
|     |     |     |-- Signup.js
|     |     |     |-- Events.js
|     |     |     |-- EventDetails.js
|     |     |     |-- Register.js
|     |     |-- App.js
|     |     |-- index.js
|     |     |-- styles/
|     |-- package.json
|-- backend/
|     |-- server.js
|     |-- routes/
|     |     |-- authRoutes.js
|     |     |-- eventRoutes.js
|     |-- models/
|     |     |-- User.js
|     |     |-- Event.js
|     |-- controllers/
|     |-- config/
|     |-- package.json
|-- README.md
```

2. UI/UX Design Guide

Color Palette:

- **Primary Color:** #4A90E2 (Blue)
- **Secondary Color:** #FF6B6B (Red)
- **Background Color:** #F5F5F5 (Light Grey)
- **Text Color:** #333333 (Dark Grey)

Typography:

- Headings: **Poppins (Bold, 24px)**
- Body: **Roboto (Regular, 16px)**

Icons: (Use FontAwesome or Material Icons)

- Home: `fa-home`
- Events: `fa-calendar-alt`
- Login: `fa-sign-in-alt`
- Register: `fa-user-plus`

3. Wireframe Layout

Navbar (Top Right Corner):

```
----------------------------------------
| NCW Event Organizer      Home Events |
----------------------------------------
```

Home Page:

- Welcome text + **Event Calendar**
- Recent Events Section
- **Navigation Links** (Home, Events, Contact)

Event Details Page:

- Event **Title, Date, Venue, Description**
- **Event Poster & Images**
- **Registration Button** (Leads to Register Page)

Registration Page:

- Form Fields:
    - Name, Email, Department, College (if external student)

- o   Event Selection
- o   Individual/Team Participation
- **Submit Button**

4. Development Steps

Step 1: Setup Frontend (React.js)

1. Create React App: `npx create-react-app ncw-event-organizer`
2. Install Dependencies: `npm install react-router-dom axios firebase`
3. Setup Components & Pages in `src/`
4. Design Navbar and Footer (Inside `components/`)

Step 2: Backend Setup (Node.js + Express.js)

1. Create Server: `npm init -y`
2. Install Dependencies: `npm install express mongoose cors dotenv`
3. Setup Routes (Authentication & Events API)
4. Connect MongoDB or Firebase

Step 3: Integrate Backend with Frontend

1. Fetch Events from Database
2. Implement Authentication
3. Handle Form Submission for Registration

Step 4: Hosting & Deployment

1. Host Frontend on **Netlify**
2. Deploy Backend on **Render**
3. Connect Firebase Database

5. Project Completion Checklist

✅ Responsive UI/UX
✅ Secure Login & Signup
✅ Event Calendar & Registration
✅ Mobile-Friendly Design
✅ Hosting & Deployment

This guide ensures a smooth development process. Let me know if you need any modifications!
🚀