# 1. Mobile App (React Native + Expo) - [1.5-2 hrs]

### Task:

Build a simple mobile app with:

- Login screen (email/password)
- To-Do list screen (create, view, delete tasks)
- Consume GraphQL API (hosted separately)

#### **Focus Areas:**

- UI/UX basics
- API integration via GraphQL
- React Navigation usage

#### **Bonus:**

• Offline support or local state cache

## 2. Backend (Node.js + GraphQL) – [1.5 hrs]

### Task:

Create a minimal GraphQL server that:

- Supports user login/signup (with dummy auth)
- CRUD for to-do items (user-scoped)

## **Stack Hints:**

- Use Apollo Server
- Store data in-memory or simple file-based persistence (e.g., lowdb)

# 3. Web App (React + Vercel) – [1–1.5 hrs]

### Task:

Create a simple React web app:

- Same features as mobile: login and to-do list
- Deploy on Vercel and submit live link

### **Bonus:**

• Use a component library (e.g., Chakra UI, Tailwind CSS)

• Responsive design

# 4. Cloud (AWS) - [1 hr]

### Task:

- Deploy the GraphQL backend to AWS Lambda or EC2
- Or alternatively, write a short deployment plan (architecture, services, cost estimate)

# **Submission Checklist**

Have candidates submit:

- GitHub repo link (organized folders: mobile, backend, web)
- Live Vercel link (web app)
- (Optional) AWS backend link or deployment steps
- README with:
  - Setup instructions
  - o Architecture decisions
  - o Time taken