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Completed the project name as

Phase\_3\_TECHNOLOGY PROJECT

NAME: IBM-NJ EVENT SCHEDULER APP

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# Phase3—IBM-NJ EVENT SCHEDULER APP

## 1. ProjectSetup

- InitializetheprojectrepositoryonGitHub.
- SetupfrontendenvironmentusingReact.js(orHTML, CSS,JSwithTailwindCSS).
- SetupbackendenvironmentwithNode.jsandExpress.js.
- Connectbackendwithadatabase(MongoDB/MySQL).
- Installdependencies(ReactRouter, Axios, Express, JWT, bcrypt, Mongoose/Sequelize).
- Initializetheproject environment usinga modernframework(e.g.,ReactNative/Flutterformobile,orReact/ Vue for web).
- Setupdevelopmenttools, dependencies, and folderstructure.
- Configureenvironmentfilesandpackagemanagers.
- Integrateataskmanager(likeTrello,Jira)forsprinttracking.

## 2. CoreFeaturesImplementation

- UserAuthentication:Login,Register,andLogout withsecurepasswordhashing.
- Event Management:
  - o Createanevent(title,description,date,time, venue).
  - o Updateorcancelanexistingevent.
  - o Vieweventdetailsinadashboardorcalendarview.
- EventReminders: Notification system to a lertuser sbefore event start.
- **ParticipantManagement**:Optiontoinviteparticipants(email/notification).
- **UserRegistration/Login**(Authenticationsystem)
- **CreateEvents**:Userscanscheduleeventsbyinputtingtitle, description, time, date, and location.
- Edit/DeleteEvents
- **ViewScheduledEvents**inalistorcalendarview.
- **Reminder/NotificationSystem**(ifpossiblewithinMVPscope)
- BasicUI/UX fornavigationbetweenviews/screens.





# 3. DataStorage(LocalState/Database)

#### • FrontendLocalState:

 Storetemporarydata likeevent forminputs, authenticationtokens, and UI states using React's use State/use Context or Redux.

#### Database:

- o Usertable/collection(ID,username,email,password).
- Eventstable/collection(ID,title, description,date,time,venue,participants).
- o Notifications/reminderstable/collection(linkedtoevents).
- Uselocalstatemanagement (e.g.,Redux,React ContextAPI,orProviderforFlutter)formanagingtemporary user and event data.
- Setuppersistentstorage:
- Frontend-onlyMVP:UselocalStorageorAsyncStorageforstoringdatatemporarily.
- **Full-stackMVP**:Integratewithabackend(e.g.,Firebase,Node.js+MongoDB)foruserandevent data persistence.
- Defineandstructuredatamodels(Event, User).

### 4. TestingCoreFeatures

- TestUserAuthentication—userscanregister/loginsuccessfully.
- $\bullet \quad Test \textbf{EventCRUDoperations} {\rightarrow} create, update, delete events.$
- Test **EventReminders**  $\rightarrow$  notificationstriggeratcorrecttimes.
- TestMulti-userfunctionality  $\rightarrow$  events synccorrectly between users.
- UnittestingwithJest/MochaforbackendAPIs.
- Writeunit testsforcorefunctionalitieslikeeventcreation, deletion, and validation.
- Performmanualtesting of userflows:





- Usetestingtools(e.g., Jest, FlutterTest,PostmanforAPItesting).
- Bugtrackinganditerationbasedontestresults.

# 5. VersionControl(GitHub)

- Maintainrepositorywithbranchesforeachfeature(e.g., auth-feature, event-feature).
- Regularcommits with meaningful messages.
- UseGitHubProjects/Issuesfortasktracking.
- Enable **GitHubActions** for automated testing and deployment pipeline.
- InitializeaGitrepositoryand pushcodeto GitHub.
- Usebranchingstrategy(e.g., main,dev,feature/\*)forcollaborativedevelopment.
- Regularcommits with meaning ful messages.
- Ensureacleanandwell-documentedcommithistory.