**3-3 Project One**

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**Goals Of The Project**

I've chosen "Option 2: Event Tracking App" for the project. The purpose of this app is so users can keep track of events and their dates and times. During the time leading up to the event, users will receive notification reminders. Several key components are needed to achieve this goal, including a database with two tables, a login screen, and a grid showing upcoming events. The system should also provide an add/remove mechanism for events.

**Users and Assumptions**

Various types of users can use the Event Tracking App, each with their own preferences and needs. In order for individuals managing their personal events to be successful, they need an efficient way to organize and track their daily tasks, appointments, and social events, with their primary goal being effective event management and receiving timely notifications. Small organizations or teams may require a platform for effective collaboration and coordination among members, with goals that include sharing event information, managing everyday tasks, and synchronizing schedules.

Event planners or professionals managing multiple client events need advanced tools for organizing, scheduling, and monitoring event progress. Their primary goals are seamless event coordination, task delegation, and communication with clients or stakeholders. Likewise, freelancers or gig workers juggling multiple projects and tasks across various clients need a robust event-tracking system to manage deadlines, client meetings, and project milestones. Their primary goals are staying organized, managing priorities, and meeting deadlines.

Managing events will be more accessible if users have an intuitive, user-friendly interface. It will also be necessary for them to easily and clearly see the event information and navigate the app seamlessly throughout the event tracking and management process.

**Screens and Features for a User-centered UI**

In the user interface, users will be able to log in with their existing credentials or register for a new account. Usernames and passwords will be inputted on this screen, along with buttons for logging in, registering, and resetting passwords. All upcoming events will be displayed in the Main Event Screen, and buttons will be available to add new events, edit existing events, and delete existing events. A search feature will let users filter events by date, title, or other things. On the Add/Edit Event Screen, users can enter event details, set reminders, and save/cancel changes. Last but not least, the app has a notification system to let users know about upcoming events and customizable settings.

***Login/Registration Screen***

The first screen users see is the Login/Registration Screen, where they can log in with their existing credentials or create a new one. The login page will have user-friendly input fields and buttons for logging in, signing up, and resetting passwords. After successful authentication, users will go to the Main Event Screen. The design of these screens will follow the Android Design and Quality Guidelines to ensure consistency and ease of use.

***Main Event Screen***

The Main Event Screen is where users can view and manage their events. A grid will show all upcoming events, making it easy to see what's coming up. It'll also have buttons for adding new events, editing existing events, and deleting them. Users can filter events based on date, title, or type using the event search functionality. Users will move from the Main Event Screen to the Add/Edit Event Screen when creating or modifying events.

***Add/Edit Event Screen***

The Add/Edit Event Screen allows users to edit event details seamlessly. It'll have input fields for the title, date, time, and event description. Furthermore, users can set reminders to get notifications for their events. Finally, users can confirm or cancel changes to event details with the save and cancel buttons.

***Notifications and Customization***

An important feature of the Event Tracking App is its notification system, which alerts users about upcoming events. There will be customizable settings for the type and frequency of notifications, so users can make it work for them. While not a separate screen, this feature will integrate seamlessly with the other screens to keep users informed and engaged with their events.

**User Navigation and Functional App Requirements**

***Data Flow and UI Components***

To create a seamless user experience, the functional app requirements will be represented in the code and connected to the UI through various data calls. These data calls will facilitate the flow of information between the code and screens, enabling users to interact with the app effectively. By identifying the major UI components on each screen, we can determine the data calls necessary to display information or accept user input.

***Database Connections and CRUD Operations***

Managing and storing event data is a key feature of the Event Tracking App. This functionality will be achieved through database connections, allowing the app to perform CRUD (Create, Read, Update, Delete) operations. For example, users will be authenticated or create new accounts on the Login/Registration Screen. At the same time, events will be retrieved, displayed, and filtered on the Main Event Screen. Similarly, the Add/Edit Event Screen will need data calls to add or update events in the database and manage reminders. With these database connections, the UI components can interact effectively with the underlying data, providing users with a responsive and intuitive event management experience.

***Integrating Functional Requirements with UI Components***

Functional requirements must be integrated with the UI components to ensure user expectations are met. For instance, the login/registration screen will accept user credentials, while the buttons will initiate data calls for authentication. A grid that displays events is populated with data from the database, and buttons for adding, editing, and deleting events are available on the Main Event Screen. Additionally, the Add/Edit Event Screen will accept event details, and the buttons will facilitate saving or discarding the changes. With a clear connection between functional requirements and UI components, the Event Tracking App will provide a user-centered experience.

Following the Android Design and Quality Guidelines will ensure that the app provides a consistent, user-friendly, and high-quality experience for all users. Users will primarily navigate between the Login/Registration, Main Event, and Add/Edit Event screens. In addition, the app will connect its functional requirements to the UI through database connections and data calls.