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## **TeuxDeux**

### Group 3 Project Proposal

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TeuxDeux is a to do list mobile application that will list different errands or tasks to help a user remember details about what they need to accomplish during any given day. This application will help organize tasks, keep a user focused, and make their life much more manageable. Viewing an outline of tasks or things that need to be done will help a user stay on task and keep them grounded.

First and foremost, TeuxDeux needs to allow a user to create, read, update, and delete tasks. The user should also be able to sign up, sign in, and sign out. Other main features of TeuxDeux would involve a check box for done/undone tasks. It would be beneficial for a user to be able to view a list of their unfinished tasks as well as overdue tasks. Along the same lines, a user should be able to view a list of the tasks that they completed. Having a calendar for a user to access would be essential for a user to view past to do lists and create to do lists for days in the future. It would be nice to allow a user to export data to a text file so that they can print out a to do list. It would also be great for a user to have the ability to name and rename tasks. TeuxDeux should help keep a user on schedule by sending them notifications and alerts. A nice interface that would be easy to use on a mobile device is necessary. An option for making this easy-to-use interface could be achieved by offering a navigation menu that will grant a user easy access to the different features of the application.

March 1st, 2022

We can organize the application with the MVVM design pattern. This would allow us to separate UI logic from business logic. It would be easy to implement more complex functional tasks with this design pattern and give a user a wider choice of actions and interactions with TeuxDeux. Since this application will start off small, I think MVVM is the best approach because it offers the prospect of slightly expanding the functionality as we add new features throughout the semester.

Google Calendar API would allow us to integrate TeuxDeux with Google Calendar and open options for users of the app to create events, get push notifications, and get reminders. More advanced features of the Google Calendar API involve editing private calendars, adding alerts, and searching for and viewing shared calendars.

The Firebase Kotlin SDK provides a common API to access Firebase for projects targeting iOS, Android, and JS which means we could use Firebase directly in our code. There are plenty of resources available online to help us connect to Firebase in Kotlin.

Our team consists of six members which means extensive use of git will be used for version control so that we can all stay up to date with the latest code. Our repository will be held on GitHub. Each member will be assigned certain tasks to complete. GitHub will make it easier to manage each task as well as help us track bugs and receive feature requests from other team members.

Ultimately this app will be intended for a single user with some sharing for something like a grocery list. If this were a project manager app there would be much more involved like task tracking and resource leveling, but the focus should be toward a personal to do list. Keeping a single user in mind throughout the application

March 1st, 2022

development process will ensure a single user is able to write, organize, and reprioritize tasks in the most efficient way possible.