**User Components and Data**

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The following is a short analysis of a mobile application that incorporates data for users to access in its design as well as the application’s purpose, the possible data sources of the mobile app, and how the data that users interact with helps them meet their goals.

The application I have chosen to discuss is Robinhood (Robinhood Markets Inc., 2023). The application’s purpose is to provide a means for its users to invest money by trading stocks, options, ETFs, and even cryptocurrency with zero commission fees (Robinhood Markets Inc., 2023). The app's first or primary screen displays to the user how much money they are currently investing, an activity graph that shows the user's investment activity, which can be displayed as live information. The user can also select to have this information displayed for the current day, past week, month, three months, or the past year. This screen also shows each of the user's investments and how they are doing individually and provides a way for users to transfer money from their bank account into their Robinhood account. The UI components for this screen include a button for searching for different stocks, options ETFs, and crypto, a notifications button, a button called “buying power” where the user is taken to a screen where they can transfer money between accounts, and the screen itself is scrollable so that the user can see all the different types of information that relates to their overall investment and each individual investment that the user has made. It also provides a way for the user to create lists of specific investments the user would like to keep track of. Each list that the user creates has a drop-down button that can be clicked, which expands or collapses each of the lists. Also, the graph that tracks the user's overall investment has buttons for selecting the amount of time that the user wants this information displayed. There is a button for “live”, “1D” (one day), “1W”, “1M”, “3M”, and “YTD”.

The second screen of the app is a screen that is specifically for crypto investments and it provides all of the same information as the first screen except that it only displays crypto investments. This screen includes all of the same types of UI components as the first screen. However, it includes a button labeled “Buy Crypto” which is always predominantly displayed on the UI, no matter where on this screen the user has scrolled. Additionally, the user can explore cryptocurrencies. Each cryptocurrency that is displayed to the user is also a button that when clicked takes the user to a screen that displays information for that specific cryptocurrency.

The app's third screen is specifically putting money into an IRA. If the user chooses to get started, the app guides the user through a process for opening either a traditional or Roth IRA. This screen does not have all of the same standard UI elements such as a search bar or notification button like the other main screens do. This screen is a series of buttons that help guide the user when deciding to open an IRA account.

The fourth screen is for the Robinhood Cash Card. Currently, my app displays that the card is currently unavailable and says it will notify me when it does become available. It also lists all of the benefits that will be associated with having a Robinhood Cash Card. This screen is scrollable so that the user can read all of the information that is displayed to them about getting a Robinhood Cash Card. Additionally, it has two clickable links, one that when pressed, opens a link that displays a notice about disclosures, and a second link that, when pressed, displays information about other fees that might apply to having a Robinhood Cash Card.

The last screen of the app is the user's summary of investments. It again shows how much money the user is investing and provides a visual breakdown of how diversified the user's total investment is. It displays this information as a percentage of how much of the total investment is either in stocks, ETFs, options, or crypto. This screen includes the same type of UI components as previous screens. It is scrollable so that the user can see all of the information that is being presented to them. This screen makes use of a menu button that when pressed, takes the user to a new screen that displays a variety of buttons that will display specific information as it relates to the user's account. The breakdown of the user's type of investments are also buttons that when pressed, show the user what percentage of their overall investment is either in stocks, ETFs, Options, or Crypto. Overall, the major UI components for the application are buttons and scrollable elements.

Data is included in every screen, whether it be data that is displayed to the user about various stocks, options, ETFs, or cryptocurrencies that are available to invest in, or data about the investments the user has made and how those investments are doing. Some screens simply display data that is relevant to specific features of the application, and the last screen contains data that is specific to the user, how diversified they are, and even data as it relates to the user's account, their history, and even account preferences. The data that is displayed to users about stocks, options, ETFs, and cryptocurrency all come from an external source. Data about how much the user has invested in total or in individual investments is internal, however, current values are calculated based on external data from markets. The application accepts input from the user, which is stored internally (with Robinhood), about the user and the user’s preferences. It accepts input whenever the user needs to make changes to their account or their preferences. Also, another way the application accepts input from the user is when the user is searching for a particular investment. If the investment is found, the relevant information is then displayed to the user. Also, the application accepts input from the user whenever the user is purchasing or selling investments or transferring money from the user’s bank account to the Robinhood app and vice versa. If the user is purchasing or selling investments, it always asks the user how much to purchase or sell, either by quantity or value. Similarly, when transferring money between accounts, the application expects/accepts a value for the amount of money that is to be transferred. The last data source that the application uses is a database for usernames and passwords, which is external to the app, but is a data source for the company. It is used to verify users and their credentials for authentication purposes. In summary, data that is displayed to the user about investments is external and does not come from the user. Data about money is accepted as input from the user and verified by external sources that funds exist, or that the user can make purchases or sell investments based on availability. A database of all usernames and passwords is stored externally, however, the user's input is verified against this database.

The primary goal of this application is for users to be able to invest their money in stocks, options, ETFs, and cryptocurrency. Therefore, much of the data that is presented to users is how stocks, options, ETFs, and cryptocurrencies are performing. The application can also display information regarding how these investments have performed in the past. By displaying this information to users, users can make informed decisions about what investments they should make and when. Based on how users feel investments are performing, they can decide to purchase or sell any portion of investments they currently hold.

**References**

Robinhood Markets Inc. (2023). *Robinhood* [Mobile App]. Apple App Store.

<https://apps.apple.com/us/app/robinhood-investing-for-all/id938003185>