Flow of Events

Register

- 1. The user enters a username
- 2. The user enters a password. Password must be at least 8 characters long and contain at least 1 number
- 3. If the password matches the criteria, the user enters the password again to confirm it
- 4. If both passwords match, a new user account is created

AF-S3: If the password is invalid

- 1. Display message: "Password must be at least 8 characters long and contain at least 1 number. Please enter a new password"
- 2. Return to step 2

AF-S4: If the passwords do not match

- 1. Display message: "Passwords do not match. Please try again"
- 2. Return to step 3

Login

- 1. The user enters their username
- 2. The user enters their password
- If the username and password is correct, the user successfully logs into the user home

AF-S3: If the username or password or both are not correct

- 1. Display message: "Invalid username and/or password. Please try again"
- 2. Return to step 1

Edit Transaction History

- 1. The user selects either "Log Stock Purchase" or "Log Stock Sale"
- 2. The user inputs stock details: Stock Acronym, Quantity, Purchase/Sale Price, and Date
- 3. The user can repeat steps 2 and 3 as needed

Receive Notifications

- 1. The user is given the option to receive real-time notifications from the application
- 2. If the user selects the "Allow notifications" option, the system will save the user's preference.
- 3. Notifications can be triggered by various events
- 4. Notifications are delivered in real-time to keep users informed promptly
- 5. The user can interact with the notification by clicking on them to view more details or take action

AF-S2

- 1. The system saves the user's preference to not receive notifications.
- 2. The user can update their preference in the profile settings.

Filter Stock Lists by Attribute

- 1. The user accesses the stock list where they can view available stocks
- 2. The user selects the filter criteria or attributes they want to apply to the stock list.
- 3. Once the user selects their desired filter criteria, they click the "Apply Filters" button to initiate the filtering process.
- 4. The app applies the selected filters to the stock list and only stocks that meet the chosen criteria are displayed to the user in the filtered results.
- 5. The user can click on individual stocks in the filtered list to access more detailed information including charts, financial data, news and historical performance.
- 6. The user can refine their filters to further narrow down their selection.
- 7. The user has the option to clear applied filters and return to the unfiltered stock list.

View Stock Charts

- 1. The user enters the stock acronym or name they want to view
- 2. The user selects a specific stock from the search results
- 3. The user specifies the desired timeframe for the chart: "1 Day", "1 Week", "1 Month", "6 Months", "1 Year"
- 4. The system generates and displays the respective stock chart.

View Optimised Portfolio

- 1. The user accesses the "My Optimised Portfolio" tab
- 2. The system fetches parameters set by the user: user preference, risk tolerance, investment goal
- 3. The system retrieves historical data for the specified assets from the Yahoo Finance API
- 4. The system calculates the Sharpe ratio from the data collected
- 5. The system displays a list of stocks to purchase or sell and their respective recommended amounts
- 6. If the user selects "Accept New Portfolio", the corresponding transactions are automatically logged into their transaction history

AF-S6: The user selects "Reject New Portfolio"

1. Display "Please go to Edit Transaction History if you have made any new transactions"

View Transaction History

- 1. The user selects "Transaction History"
- 2. The user selects the filter criteria or attributes they want to apply to the stock list.
- 3. Once the user selects their desired filter criteria, they click the "Apply Filters" button to initiate the filtering process.
- 4. The system displays a list of the user's past transactions, sorted by date. Details like date, quantity and purchase/sale price are listed.