Robinhood Mobile Application Redesign

Robinhood

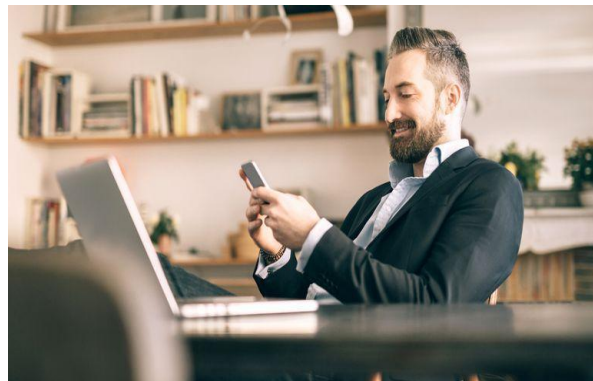Mutyala Hemaprashanthi, Poosarla Sita Anusha, Venkatesha Prajwal K, Sand Shubham Sandeep

Introduction

- Robinhood is a U.S based financial service company.
- The company has a smartphone mobile application where users can invest in public companies and exchange-traded funds.
- A public company can be defined as an ownership which is organized via shares of stocks.
- An exchange-traded fund is an investment which is traded on exchange of stocks or more likely the stocks.

User Profile

Avon Smith
A student and a novice user having interest in trading.

- Goals
  - Buying less valued stocks frequently
  - Sell stocks with the price surge
  - Save stocks to watchlist to make a decision
- Frustrations with the previous app
  - When he cannot find a certain stock
  - Unclear instructions while buying and selling stocks.

Catherine Johnson
A Stockbroker for three years who does high volume trading

- Goals
  - Buying the stocks of companies with good price history.
  - Wait till there is a huge increase in the price of the stock
- Frustrations
  - When he cannot find a certain stock
  - When price prediction is wrong
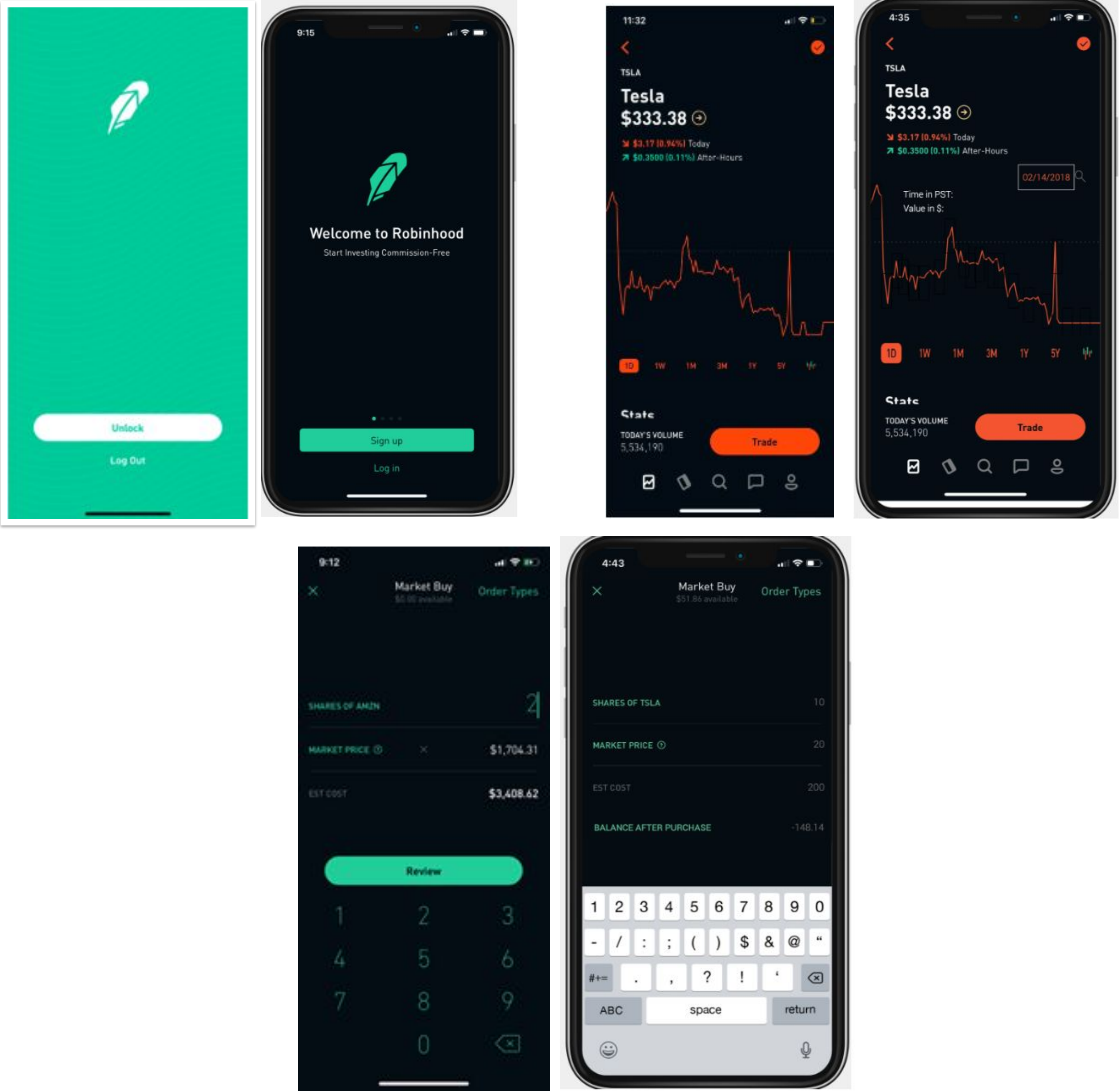 - When prices of stocks change on checkout.

Methods

- Data collection for an original and new design:
  - User survey: understand user groups
  - User interview: observed the engagement with the features on Robinhood Mobile application
  - Design evaluation: based on Nielsen's Usability Heuristics
- Prototype design:
  - Initial prototype evaluation
  - Low-fidelity wireframes ideas jotted down on paper
  - High-fidelity prototype using Just in Mind

Usability Metrics

- Visually Appealing
  - User survey to figure out the perspective of prospective user.
- Ease of use
  - Qualitative metric
  - Deduced by monitoring user interaction on similar applications
  - Compare number of steps required to accomplish a task on Robinhood
- Efficiency of a task performed
  - Use of Recall and Recognition
  - Weigh in the number of errors user makes while performing a task.
  - Time saved over a task for e.g. use of one click systems versus long pending tasks.

Prototype

Findings

User interview survey evaluation:
- There is high cognitive impetus on the user on the search page owing to the content including stock stats, graphs and news pertaining to stock.
- Stock screen time frame selection buttons are too small (Fitts's law)
- Difficult for users to navigate to historical stock prices with graph walkthrough.

Suggestions:
- Create tap target buttons of size at least equal to **44 points** as opposed to original **28 points**
- Provide a search tool to fine grain search results.
- Reduce the amount of content especially related stock stats and news.

Conclusion

- Based on our usability testing results, we have produced a redesign that addresses specific user pain points.
- Improvements include:
  - Reduce the content in the stock page
  - Increase button tap size targets.
  - Include a search bar to fine grain search based on date
  - Add new features to help the user to use Robinhood to its fullest potential.
  - Reduce number of steps for
  - Calculations
- Future iterations could work on:

Acknowledgement