Project Features / Requirements:
- **Competitive Mode:** Start with a base amount of money ($1,000), create a competitive atmosphere with a global leaderboard. If you reach $0, you are eliminated from the competition. Competitive seasons will last six days, and users rankings of all past competitive seasons will be displayed on their profiles. Limit of one competitive profile per user.

  Functional Requirements:
  - As a user, I want to compete with other people so that I can see how well I do compared to others in a real-world scenario.
  - As a user, I want to enter my competitive profile into the next available competition.
  - As a user, I want to be able to buy and sell stock in competitive mode once the competition starts.
  - As a user, I want to see when the competition is going to end so that I can determine when to make my final moves.
  - As a user, I want to be able to see my current competitive mode "wallet" so that I can view my progress in the competition.

  Nonfunctional Requirements:
  - Users are given a starting balance of $1,000 and cannot add funds to the wallet at will.
  - Users cannot begin trading until the competition begins.
  - The user's leftover stocks will be sold at the end of the competition, and the final balance in the competitive mode wallet will be recorded.
  - Once the competition is over, the user's placement will be displayed and recorded to their profile for them.
  - Users will not be able to see their placement in the contest until it is over, and the results are calculated.
  - Competitions will be for six days from start to end.
  - If a user runs out of money to trade or goes "bankrupt," they are eliminated from the competition. Their placement will not be recorded regularly, but rather as "Eliminated."

- **Sandbox Mode** - in this mode, users can add or subtract money at will.
  - Functional Requirements:
    - As a user, I want to be able to buy and sell stocks freely, and with any amount of money, I want so that I can learn more about the stock market and ways to trade.
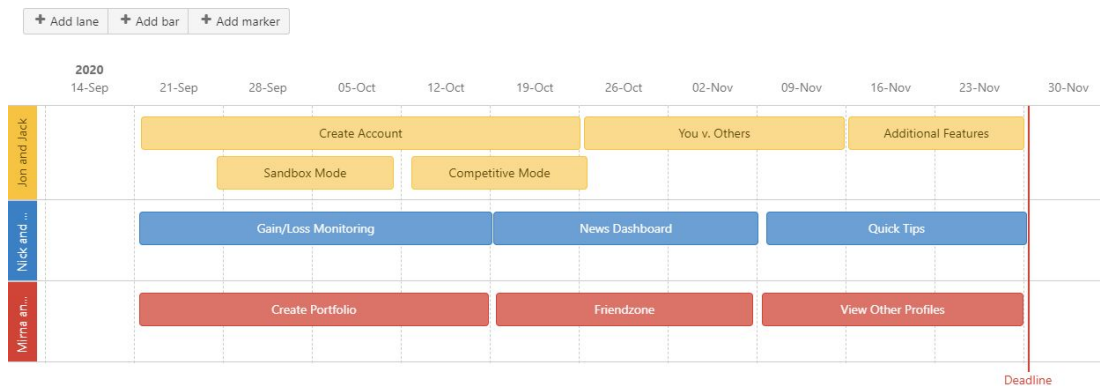
- As a user, I want to be able to change my sandbox account balance at my will.
- As a user, I want to be able to clear my sandbox "wallet" so that I can restart my portfolio if it is not going the way I want it to.
- Nonfunctional Requirements:
    - Users' first profiles are created in Sandbox Mode.
    - Users may not input a negative balance or a balance of above $100,000,000.
    - Users input the amount of money they want to start with and cannot add more until they clear their "wallet."
    - As a user clears their "wallet," their current investments are all dropped, and the "wallet" balance is set to 0. This will reset their current sandbox profile.
    - Sandbox mode will always be available, whereas competitive mode is not.

- **View Portfolio** - Tab for the user to view stocks that they are invested in and add stocks to a watchlist for future investments.
    - Functional Requirements:
        - As a user, I want to view the stocks that I am currently invested in
        - As a user, I want to add stocks to a watchlist.
    - Nonfunctional Requirements:
        - Display net profit/loss on the portfolio page
        - For stocks on the watchlist, show the value that the stock was when added compared to what the stock is currently at.

- **Gain/Loss Monitoring** - Total value in users' wallets updates based on real-live stocks' current pricing.
    - Functional requirements:
        - As a user, I want to be able to check and see how my investments are doing since I last checked so I can see how my profiles are doing.

    - NonFunctional Requirements:
        - Stock positions are updated once every 30 minutes.

- **Multiple Profiles -** a single user can make multiple profiles to allow them to invest in different ways at the same time so that they aren't limited to a single

profile for stock options. The user's first profile will be for sandbox mode, and any others made after will be for the sandbox mode.

- Functional Requirements-
    - As a user, I want to be able to make multiple profiles and switch between them so I can monitor my progress
- Nonfunctional Requirements-
    - Users can only have one sandbox/competitive profile per email.

- **You vs. Others** - comparison tool compares your performance among other users (x% of users experienced a y% increase/decrease in their wallet value this week. Your account has grown z% in comparison to most other users….)
    - Functional Requirements-
        - As a user, I want to see how I'm doing against other people so I can tell if I'm making good investment decisions
    - Nonfunctional requirements-
        - Banner updates users that they've experienced x% increase/decrease whereas other users experienced an average y% increase/decrease.

- **Friend Zone** - ability to add friends and compete with them/view their profiles and performance in the market.
    - Functional Requirements:
        - As a user, I want to be able to add friends.
        - As a user, I want to view my friends' profiles and net profit/loss.
        - As a user, I want to be able to remove friends.
    - Nonfunctional Requirements:
        - Users may not have more than 100 friends :(

- **Quick Tips** - suggest tips to users whose profiles aren't performing well so that they can learn from any mistakes made.

- **News dashboard -** users can check the latest market news on a specified dashboard.
    - Functional Requirements-
        - As a user, I want to be able to check my news feed so I can keep up to date on the latest market news
    - Nonfunctional requirements-
        - Pull news from finnhub API daily
        - Add most recent news to the top of the dashboard

Project Plan/Individual Contributions:
Link to Project Plan: https://csci-3308-fa20-101-1.atlassian.net/l/c/LmTMJdwg

Problem Statement

To provide a competitive, risk-free introduction to investing for all.

Features

- **Create a User Account (Sandbox Mode):** Ability to add fake funds to the user's wallet and build a portfolio of investments
  - WHEN: Oct 5, 2020

- **Create User Account (Competitive Mode):** Start with default account balance and compete against other players for having the biggest increase of balance
  - WHEN: Oct 26, 2020

- **Gain/Loss Monitoring:** Update users'wallet balances based off of current stock pricing
  - WHEN: Oct 19, 2020

- **News Dashboard:** Be able to access up-to-date stock/investment-related news in application
  - WHEN: Nov 2, 2020

- **You v. Others:** Be able to compare your progress with other players
  - WHEN: Nov 9, 2020

- **Friend Zone:** Connect with other users and view friend's profile information
  - WHEN: Nov 2, 2020

Sprints:

Individual Contributions: Each member chose the area that they wanted to work on the most (Frontend or Backend). For the frontend, Mirna and Sage will be in charge of the overall user interface/design and routing of our app. The other group members will assist in providing the backend for the website and help with the integration of the frontend and backend. Jon and Jack will be responsible for the Create Account feature and other features that are dedicated to the users' accounts. At the same time, Nick and Hampton will be responsible for integrating the API with the rest of our project (Gain/Loss Monitoring, News Dashboard, Quick Tips). Though we are split into three separate groups, everybody will contribute to all different areas of our project.

Tasks for 09/21 - 10/05:

ALL MEMBERS: Set up VS Code for Javascript environment and get familiar with JS language.

Backend:
    Feature: Create Account
        Jon and Jack: Make skeleton code for creating a User Account by Oct 5.
    Feature: Gain/Loss Monitoring:
        Hampton and Nick: Research types and implementation of APIs to use for the application. Hone in on one by Oct 5.
    (API key: btg0j4n48v6rl6gbvq70)

Frontend:
    Feature: Portfolio
        Mirna and Sage: Rough sketches of web layout using Figma. Have a basic web layout scheme by Oct 5.

Wire Frames:

Logging in mode: if the user chooses the login, then the user will be directed to the following page.

Register mode: if the user chooses the register, then the user will be directed to the following page

Figma:

https://www.figma.com/proto/gEdgXp0hQcEpNundxp2rUI/buufofwallstreet?node-id=1%3A13&scaling=min-zoom