**Team Number: 101-1** 

**Team Name:** Buffs of Wallstreet

Team Members: Jack Blackburn, Hampton Walker, Sage Long, Mirna Masri, Nick Spooner,

Jon Gordon

**Application Name: MockStock** 

**Application Description:** We will create a mobile application that will take in data from the stock market and allow our users to invest fake money as if they were really investing. They will be able to monitor the changes of the market within the app. There will be a "wallet" for each user to check how all of their investments are doing. There will also be a news tab updated daily for users to check out the latest market news from around the world.

Unlike other stock trading apps, our app allows users to participate in competitive events against the entire MockStock community to see how their trading skills develop over time. Our app will allow our users to learn the basics of the stock market without having to risk anything while getting real experience at the same time. A single user will be able to make different profiles so they can invest in different ways and see which profile will have the best performance.

**Vision Statement:** To provide a competitive, risk-free introduction to investing for all.

- **For:** Business students, anybody that is interested in the stock market but intimidated by it. We want our consumers to see our application as a risk free tool to learn about the stock market.
- Who: Ability to learn to trade stocks risk free
- **The**: MockStock is a trading app that allows you to interact with the stock market without actually entering any of your own money
- **Unlike** other mock trading sites, this application will provide a competitive mode, allowing users to compete against each other providing for a more engaging learning experience.

Version Control: <a href="https://github.com/CSCI-3308-CU-Boulder/101-1-BuffsOfWallstreet">https://github.com/CSCI-3308-CU-Boulder/101-1-BuffsOfWallstreet</a>

**Development Method:** We plan to use Agile through JIRA for the development of our app. We have included various epics, sprints, and user stories associated with our project, and we plan to have sprints in a 2-week period until our project is completed. Our weekly meetings with our TA will act as sprint reviews, where we discuss what he has completed during the sprint and what still needs to be completed before the next sprint (<a href="https://csci-3308-fa20-101-1.atlassian.net/">https://csci-3308-fa20-101-1.atlassian.net/</a>).

**Communication Plan:** We have an SMS group chat to talk about upcoming meetings and to check in on everybody's progress. We also meet on Zoom for our weekly meetings, and we are creating a Discord/Slack server as another organized form of communication.

**Meeting Plan:** We are meeting from 5-7 PM on Mondays via Zoom and we are meeting with our TA on Thursdays at 12:30 via Zoom to report progress for the week.

## **Proposed Architecture Plan:**

- **Backend:** API <a href="https://finnhub.io/">https://finnhub.io/</a>, use Websocket for real-time updates on stocks (Intrinio on GitHub), database for user data (MongoDB). The backend will pull the stock data from an API, keep track of user data (owned stock, profile data, leaderboards, etc.), and perform all tasks that allow the app to function.
- **Frontend:** Swift for Apple phones, Java for Android (maybe?), HTML/CSS/JavaScript for web (Angular, React). The frontend will present the stock data to the user so that they can keep track of their performance in the market. This is how their device will retrieve the information that our app provides.
- Communicate by web server (Node.js, Apache)

## **Use Case Diagram:**

