APPLE 2.0

Apple 2.0

Stock Portfolio Project

Scrum Report

Team Members: Courtney Colbert, Mike Gutkind, Henning Kjoeita, Lindsay Scott
Scrum Master: Lindsay Scott
Product Owner: Mike Gutkind
Estimate of total person-hours spent on all aspects of job until now: 16

Summary: Having one less sprint than we originally thought we would, the team thought it was important to work on the user interface, but at the same time, did not want to compromise the functionality of the program. First, a frontend was added to the "login" and "sign up" functions created in the previous sprint. We knew having a functional Summary page was incredibly important, as this is the first screen the user sees after they sign in. Users' favorite stocks are now displayed on the Summary page, along with the most currently active stocks. Both sets of information display the gains or losses for that stock and are color coded to reflect that. Users can view and change the order of their favorite stocks on the Your Stocks panel. The News panel provides users with the latest headlines for whichever stock is selected in the Stock Search panel. In the Stock Search panel, users may now set a time range for stock data. Lastly, the Help panel encourages users to send any comments or concerns to Apple 2.0, and provides a button that creates a new email to our customer service for convenience. In total, these improvements and implementations have contributed to our most important goal, which is an intuitive UI. Every addition to this sprint contributed to the organization of the UI and overall improvement of user experience.

User Stories:
- Intuitive UI- As a user, I would like to have a much more accessible user interface so my experience can be a lot more enjoyable than staring at a disorganized grey screen. **Implementers:** All
  - Story Points: 16
- Functional Summary Page- As a user, I would like a summary on the homepage so I can easily check and analyze my favorite stocks. **Implementers:** Mike and Lindsay

- ○ Story Points: 8
- Set Time Range- As a user, I would like to set a time range for graphs so I can identify patterns in designated periods of time. **Implementers:** Henning
  - ○ Story Points: 2
- Gains and Losses Displayed- As a user, I would like a page displaying gains and losses so I can see the state of my portfolio by having my stock gains and losses in one place. **Implementers:** Mike and Lindsay
  - ○ Story Points: 8
- News Page- As a user, I would like to be able to select an individual stock such that it opens a browser displaying any news in regards to said stock. **Implementers:** Mike
  - ○ Story Points: 4
- Color Coded Stocks- As a user, I would like to color code stocks according to gains and losses so it's easier to see whether stocks grew or fell. **Implementers:** Mike
  - ○ Story Points: 1
- Password Protected (using backend)- As a user, I would like to have the option of setting a password so my portfolio information is secure. **Implementers:** Lindsay
  - ○ Story Points: 8
- Order of Stocks- As a user, I would like to change the order in which my stocks are displayed, so I can prioritize which stocks are more important than others. **Implementers:** Courtney
  - ○ Story Points: 2
- Help Panel- As a user, I would like a support button so I can get help if the application is not working properly. **Implementers:** Courtney
  - ○ Story Points: 1

Integration Testing:
　　　　Since everyone in the group worked on a different task, we got together several times during the sprint to ensure successful integration interface. Considering the amount of functionality we currently have, we will have more than enough time to improve and build a high quality user experience for our final product.

Scrum III retrospective: Each team member's perspective of their individual contribution and accomplishment

Michael's Contribution: My focus for this sprint was split between the landing page and the News tab along with cleaning and documenting my code. I initially started by dynamically retrieving news headlines on whatever call was currently being looked at in the search functionality. Thus the major headlines involving that specific stock are then displayed in the News Panel. I also made it so the headlines presented on the page are clickable and that when the specific headline is clicked the program will launch your computer's default browser and travel to that link for the full article. The second major feature i worked on was the landing page

or "Summary Panel". This tab is designed two show two major aspects. The first being your specific user's list of favorite stocks and if they've gone up or down recently and if-so by how much. The Second section of the page displays today's most active stocks in the sense that it shows stocks with the most drastic changes over the course of the day. These stocks are analyzed by the API and reset every time the Summary tab is selected to insure the most accurate data is displayed. Finally i focused a lot on cleaning up smelly portions of our code. I went through and deleted all lines of code that were not being used and renamed variables to represent the data they hold better. I also attempted to eliminate code repetition and utilize more methods. This Sprint was very full and had many moving parts which is why i refused to finalize a feature until i tested it and fixed as many bugs as i could find.

Courtney's Contribution: My main focus for this sprint was having the favorite stocks displayed automatically refresh on the Summary and Your Stocks Panel once a stock is added in the Stock Search Panel. Also, I completed the combo boxes on the Your Stocks Panel so the displayed stocks can either be just favorites or all of your stocks, and they can be ordered alphabetically or reverse alphabetically. I finished the Help Panel by adding our logo along with a button that automatically opens the browser and creates a new email to our customer service.

Henning Kjoeita's Contribution: The third sprint I worked to ensure that everything was working as intended, and during testing I found a significant bug in the Graph. As initially it was created assuming we would only support one month, and then later 6 months and a year was added. However, while 6 months and a year works when the graph have a single stock it does not work when there is multiple stocks in the graph. I have modified the class containing the graph (CP) so that it tracks what stocks are currently in the graph. Then from the stock search panel I can use those stocks to redraw the graph correctly for 6 months and year. Unfortunately, implementing it has proven to be more time consuming than expected and I've not yet managed to deploy a fix. Though I have a good idea of how to best implement it.

Lindsay Scott's contribution: For the third sprint, I added a login and sign up screens and connected them to my previously created login and sign up functions from Sprint 2. I also implemented a method to save stocks added to the user's favorites. I decided to implement this locally first as opposed to the database. When a user creates an account, a folder is created in the user's Documents. Once the user adds a stock to their favorites from the StockSearchPanel, the stock is added to a text file inside of the folder created when the user signed up. I was then able to add the favorites to the SummaryPanel and display daily gains or losses for the stocks by integrating with Mike's code for this sprint.

Product Owner's statement of quality of product: In the current state, our product has come together very well. So far, we have been able to develop every tab available in our program to some extent. We have a login service that's connected to the backend which is exactly what we wanted. We have a Summary page that displays a users favorites and the most active stocks of the day. We have a Your Stocks panel which displays all the stocks you have specifically

discussed as being your favorite. We also have a stock search functionality which allows users to search for different graphs and compare them to one another. This feature also allows the time range for the graph to be changed. We also have a News Panel which finds and displays the most recent headlines regarding the current events around a specific stock. Finally we have a Help Panel which is mainly focused on getting the user in contacts with a support system incase they do have any problems.

Scrum Master's Statement: For Sprint 3, the team put much of the focus into improving functionality and working on the user interface. The team spent roughly 16 hours on the project for this sprint. Each member had a designated task and were able to work independently, but were able to meet several times and integrate code with minimal complications. Both the interface and functionality of the program has improved considerably since the previous sprint. Functional improvements include implementation of the News panel, the Help panel, connecting the user authentication functions to the UI (login and sign up), and improvements to the graph. The Summary page has become more user-friendly by displaying the gains or losses for favorite stocks and the most active stocks.

Further Development:

- Updates
    - Bug fixes
    - Performance improvement
    - Maintenance

Signatures:

Scrum Master _____

Product Owner _____

Team Member #1 _____

Team Member #2 _____