Scrum Report I

1.       Prologue

1.1.    Team Wasserfall

1.2.    **Members**: Zhengqi Yang, Isaiah Lloyd, Erin Sauter, Qiuda Lyu

1.3.    **Project Name**: Stock-Ticker

2.       Sprint I report:

2.1.

**Scrum Master name**:Isaiah Lloyd

**Product Owner name**: Qiuda Lyu

**Team members’ names**:  Zhengqi Yang, Erin Saunter

**Estimate of total person-hours spent on all aspects of job until now**: (Erin - 7 Hours)

2.2.

During the team’s first sprint, the main focus was upon user stories that defined the project’s design of the User Interface (UI). One of the two user stories selected for the sprint was that the software needed to be capable of displaying a virtual watchlist (portfolio) to keep track of a particular set of stocks showing both their ticker symbol and current price. Another user story required the software to include a graph showing both the real life prices and historical data of a stock using different time interval buttons to manipulate the display. Currently the team has chosen the APIs that they favor for use to provide the data but has been incapable of implementing. The team has managed to create a functional UI, which includes a list containing potential stock picks, buttons for different time intervals and a dynamic graph displaying potential stock trends. The team is currently at around 30% mark of the developmental process, and it will speed up as various core parts begin to fall in place.

2.3.

**Story Selection:**

The team had  difficulty deciding upon the API to use to pull the stock market data, so the team decided to focus on the UI first to establish a clearer structure, so that the team would be able to more quickly implement and test the data structure at a later date.

2) A graph which is able to display real-time and historical data according to different time intervals.

**User Interface:**

**Design**:

The design of the User Interface is holding elements in chosen locations by placing panels within panels to hold steady, consistent locations and sizes.  There are two primary columns of the User Interface, with the graph and buttons controlling the graph on one side, and the majority of elements dealing with stock on the other. The exception to this is the panel devoted to the purchase or sale of a stock which is beneath the graph.

**Requirements**:

A location to display a graph for stock prices, a method to manipulate the time scale of the stock graph, a method to purchase stocks and search for the stocks. The above to all be displayed in a visually appealing manner.

**Test Plan**:

Testing of of the User Interface was primarily done by running the program and visually conforming whether the design elements were in the desired locations and in the desired appearance.

**Implementation and issues**:

The implementation had the original issue of elements placed solely within a JPanel section, be it, north, south or center would expand to fill the section. At times this could merely be unpleasing on an aesthetic level, but at others it would have impairments upon program usage, such as buttons crowding others off screen. A second difficulty was the confirmation of the space for the graph due to the late integration of the scrum. A JLabel was used to verify that the JPanel to be used for the graph was inserting at the correct location.

**Outcomes**:

A usable Interface, with a preset location for graph insertion and buttons with action listeners already in place for integration with the API.

**Implementers**:

Erin Sauter, Isaiah Loyd, Qiuda Lyu

**Dynamic Data Graph**:

**Design**:

A simple XY axis chart but capable of  both taking in and displaying data dynamically.

**Implementation details and issues**:

The graph uses the jFreeChart library to create a chart which includes a actionlistener to add random data item for display.

**Statement of outcomes after unit testing**:

The outcome is fairly satisfactory. The graph exhibits satisfactory characteristics for the next stage of development. The unit test was satisfactory in its ability to display a graph and intake data, with no issues upon integration.

**Implementer**: Zhengqi Yang

2.4.   **Integration Testing**:

The integration test took place once the various codes from the team members were capable of being combined together near the end of the sprint. The integration testing had difficulties due to the graph being coded outside of the overall UI, but the difficulty of the graph popping outside the UI was resolved by removal of a programming main and conversion of the graph’s class to a JPanel extension.  After these changes the integration testing was successfully executed.

2.5.   **Scrum I retrospective**:

Erin Sauter was responsible for the button group and buttons that will control the graph’s time selection. Action listeners for these buttons have already been placed within the code, if without methods for activation at the current time. Sauter was also responsible for JLabels during the testing phrase of the User Interface prior to integration of other parts of the scrum to mark where the missing pieces of the interface would be. An additional button and action listener were also created by Sauter but were removed due to design development as were the JLabels upon integration.

Isaiah Lloyd was responsible for coding of the JFrame, the stock search bar, the button of the search bar, and the list of stocks results. These elements were completed with the use of a combination of JPanels, JTextFields, JLabels and a singular Scrollpane. Two action listeners were also added for future use of the button of the search bar. Alongside this Lloyd aided with the integration of the graph to the JPanel and did research towards the selection of an API for the project.

Zhengqi Yang created the dynamic chart that is able to display real-time data with the use of the jFreeChart library as well as a feature to apply random data to the graph for testing purposes.

Qiuda Lyu was responsible for the creation of the buy and sell buttons beneath the graph on the right hand side of the screen. He was also responsible for the creation of two action listeners to be used in conjunction with those buttons. Lyu attempted to add two new frames with the action listener.

**Product Owner’s statement of quality of product:**

Satisfactory.

**Scrum Master’s Statement**:

The amount of total effort worked on the project is about 32 hours.  What need to done next is the creation of a landing pages, and to connect our UI our APIs for our backend.

Set up for sprint 2: Add new user stories in preparation for scrum II

**Signature of Product Owner:**

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**Signature of Scrum Master:**

X\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Signatures of Team Members:**

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