

Progress Report

- Increment 1 -

Group #5

1) Team Members

Aidan Ryan - afr17b - AidanFRyan

Darbi Bauer - dkb17 - darbibauer

Sarah Rosenfeld - smr17 - SarahRosenfeld

Jacob Dienger - jwd17 - dienger

Katie Skipper - kas18ff - KatherineSkipper

2) Project Title and Description

Heimdall - Financial Recommendations

3) Accomplishments and overall project status during this increment

Thus far we have a system in place for downloading financial data from the Yahoo finance API for both stocks listed on the NYSE and their corresponding options as listed on the CBOE. Google's NLP API was implemented and is being validated with sample files, and Twitter's API is being experimented with (there have been delays in getting approval for the Twitter API). An organization for our project was created on Github, and for the time being, each of us is working in separate repositories on our respective tasks. A sample app has been created in Android Studio. This sample app consists of a preliminary GUI with several screens, next steps will be feeding data to these screens from the server.

4) Challenges, changes in the plan and scope of the project and things that went wrong during this increment

The Twitter API has posed challenges during this increment due to all of the authentications required to access it. We had to use an individual team member's twitter account to login and request developer access to use the API. There was a delay in the application submission for developer access and the acceptance so nothing can be done during that time. Additionally, there are Apps that must be created within their site to use the API's functionality. This has greatly delayed our progress in accessing tweets and performing their sentiment analysis with Google's NLP. Now that we have access to the Twitter API we are figuring out how to use it in Python by determining which Python library for twitter has our needed functionality.

5) Team Member Contribution for this increment

Aidan:

- a) Sections 3 and 4 of Progress Report
- b) Sections 2 and 3
- c) None
- d) Responsible for stocksearch, the backup branch is most recent, there are some issues with tab/space in master that need to be resolved
- e) Edited video, recorded usage of run.py (originally intended to discuss csv format of data files but that ran long)

Darbi:

- a) Helped write sections 3, 4, and 6 in the Progress Report
- b) Wrote Section 1; helped in section 3; created use case diagram in section 4
- c) Helped write section 1
- d) Became familiar with the Google NLP; got it up and running on local machine; example source code that runs the sentiment analysis can be seen on Github repository
- e) In the video, talked about individual contributions made during the first iteration and showed an example of how Google NLP code works

Sarah:

- a) Helped write sections 3, and 4 in Progress report.
- b) Contributed to the making of the use case diagram.
- c) Contributed to the Twitter for Python API description
- d) Have just recently gotten access to the Twitter API and tried importing a Twitter for Python library to be able to access functionality and start testing with sample strings. There is not any functionality to the code that is in Github because of an issue importing a library but it should work for sample strings once that is resolved.
- e) Talked about issues with the Twitter API and what we wish to do with it once issues with the library are resolved.

Jacob:

- a) Added name to Section 1 and this sentence in Section 5
- b) Added Functional Requirements (Section 2) bullet points, some Non-Functional Requirement bullet points (Section 3), created images for sequence diagrams (Section 5), description of operating environment (Section 6), some bullet points for Assumptions and Dependencies (Section 7)
- c) Contributed to Programming Languages (Section 2)
- d) Created an Android application that had buttons to lead to different screens; Designed a Sign In page for the app; started working on the Homepage of the app that allows the user to dynamically add different stock trackers
- e) Made a section of video that shows the application screens that I created and described what the future goals of those pages were

Katie:

- a) Added name in section 1 and helped write section 6
- b) Contributed in initial steps to making the use case diagram
- c) Worked on sections 1 and 2
- d) Contributed to creating the Recommendation, Settings, and Adding Twitter Follows pages to the app.
- e) Talked about where the progress for my part of the project is at and the function of pages I wrote up.

6) Plans for the next increment

For the next increment we plan to put all our code into the server. The Google NLP needs to be adapted to work with information supplied by the Twitter API. We also plan to combine everything into the app. Once the backend is completed, we will start connecting the data from the server to the app interface.

7) Link to video

<https://drive.google.com/open?id=10CChaoyZ4G-a5TLTofeieOnJe5J3YrQS>