## Software Implementation and Testing Document

For

**Group 5** 

Version 1.0

## Authors:

Darbi Bauer
Jacob Dienger
Aidan Ryan
Katie Skipper
Sarah Rosenfeld

## 1. Programming Languages

- → Python using for backend, handles interfacing with Yahoo price data, Google NLP, and Twitter API. Chosen because was one of the easier languages to use for this purpose.
- → Java using for app interface development. Is the language that Android Studio uses.
- → Cuda C++ GPU acceleration of price prediction and scoring of a particular company. Language was chosen because it handles the math better.

## 2. Platforms, APIs, Databases, and other technologies used

- → Android Studio using to create the app interface
- → Google Natural Language API using in the server side
- → Twitter API(Twitter for Python) using in the server side
- $\rightarrow$  MongoDB
- 3. Execution-based Functional Testing
- 4. Execution-based Non-Functional Testing
- 5. Non-Execution-based Testing