



NORTHERN
ARIZONA
UNIVERSITY

Deliverable 3 - Analysis

Project C.A.T. - Capital Activity Tracker

Group: "The Stockings"

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Course: CS 386 Software Engineering, Spring 2018

Instructor: Marco Gerosa

GitHub Link: <https://github.com/kdl222/CAT>

1. Description

The problem of an intimidating and time-consuming stock market trading network, in regards to buying and selling worthwhile stocks, affects experienced and inexperienced stock traders; the impact of which is the avoidance of and/or inability to properly evaluate opportunities provided by stock trading. For experienced and inexperienced stock buyers/sellers who wish to reduce the time it takes to make more informed stock market trading decisions and the risk associated with stock market trading, Capital Activity Tracker (CAT) is a stock market trend-analysis application that gathers information and provides data visualizations, live transaction suggestions, and in-depth company evaluations; unlike expensive, stock-analyzing “academies” such as IMarketsLive.com, which overwhelm the client with too many app features and unnecessary information for over \$300/month, our product offers simple ways to help users make informed stock decisions. As previously stated, CAT is a stock market analysis application that brings data visualizations and information-gathering together in an easily-accessible and affordable program, making it perfect for new and experienced stock traders alike. Equipped with live transaction suggestions and in-depth company evaluations, CAT allows traders to make more informed financial decisions than could be accomplished alone.

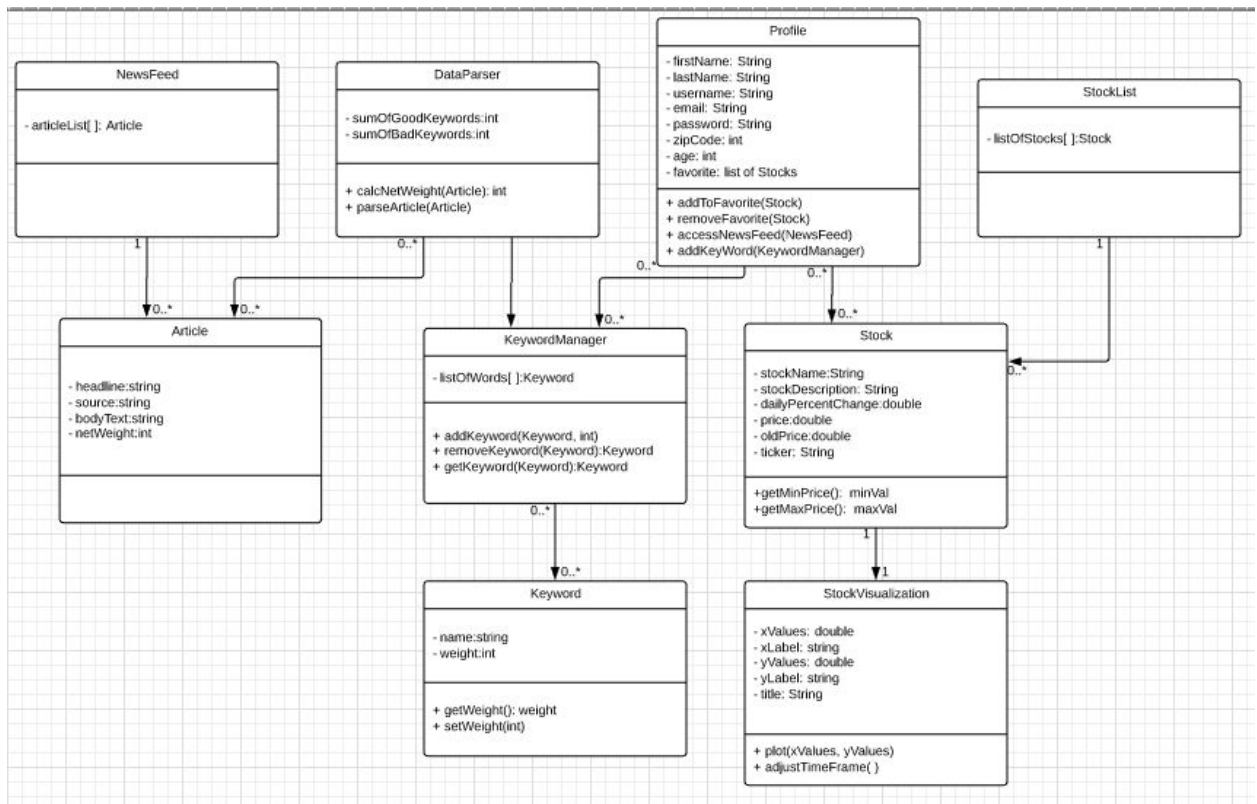
Users, primarily experienced and inexperienced stock traders, can start by creating a secure and private account on the CAT web application. In addition, they may edit their personal information (**Profile**), save **stocks** to view for later,

add **stocks** to their favorite list (**Stock List**), and add **keywords** to a glossary.

Keywords are added by a **keyword manager**, which can add and remove **keywords**, and have a *name* and *weight* associated with them. Users have the ability to track and view individual **stocks** and real-time **stock** activity graphs (**Stock Visualization**), which contain an *x-value*, *y-value*, *x-label*, *y-label*, and a *title*. They may also adjust the range of the **stock** activity that they can view at one time. A **stock** will contain a *name*, *description*, *ticker*, *price*, *old price*, and *daily percent*.

A user may also view a **news feed**, containing multiple **articles** and capable of being parsed for **keywords** by a **data parser**, which contains the *sum of all good keywords* and the *sum for all bad keywords*. **Articles** contain a *headline*, *source*, *body text*, and a *net weight*. Users also have the ability to favorite their preferred **stocks**, saving them in a list (**Stock List**) only accessible to that user on their homepage. Only users that are signed in can favorite **stocks**, access favorited **stocks**, and unfavorite **stocks**. The CAT web application should be compatible with various operating systems and on mobile platforms.

2. Model



3. Group Participation

Adam Goins: Class Diagram creation (20%)

Kaitlyn Lee: Product Description and Diagram Mapping (20%)

Brandon Horner: Class Diagram creation (20%)

Clayton Williams: Class Diagram creation (20%)

Savannah Fischer: Product Description and Diagram Mapping (20%)