**Fintech 5Falcon??? Team - Project Outline**

**Project Title:** The effect of Starbucks/HEB and Trader Joes locations on property values

**Team Members:** Quentin Reynolds, Anjana Chowdiah, Emmanuel George, Alyssa Holman, Azaldin Assi

Project Proposal and Outline (Team must decide)

*“Before you start writing any code, your group should outline the scope and purpose of your project. This will help provide direction and safeguard against scope creep. Your should format the proposal and outline as a brief summary of your interests and intent. Make sure to include:*

*• The kind of data you’d like to work with and the field you’re interested in (e.g., trading, quantitative analysis)*

*• The questions you’ll ask of the data*

*• Possible source for the data*

*It should look something like this:*

*The aim of our project is to uncover patterns in credit card fraud. We’ll examine relationships between transaction types and location, purchase prices and times of day, purchase trends over the course of a year, and other related questions that will derive from the data.”*

Project definition:

* Develop a financial application.
* ~~Analyze a financial problem.~~

What is our research question?

How does one or a combination of the above answer our research question?

Task List:

Data:

* Data mining:
  + Lookout for impact of data availability and type on project outline
  + Team to review impact on project goals and changes necessary
  + Scope of dataset to be appropriate for project scope

**Note:** Big data datasets are difficult to manage locally

* Exploration and cleanup
  + Explore
  + Clean
  + reformat

**Important:** Keep track of exploration and cleanup steps in a dedicated jupyter notebook to keep you organized and make it easier to present your work later on

* Analysis
  + massage your data ready to start crunching numbers
  + Aggregation
  + Comparison
  + Summary statistics
  + Financial analysis
    - ~~Sharpe ratio~~
    - ~~Beta~~
    - Monte Carlo Simulations

Important: Keep track of your work in a Jupyter notebook dedicated specifically to analysis

* Visualization
  + Plots during exploration and clean up
  + Plots during analysis phase
  + Look out for trends
* Presentation