Team Name: LXY Team

Project Name: Alpha FLY

### Purpose:

1. Stock traders need an application that will allow them to analyze and display information and metrics about assets such as stocks, or etf securities.

2. The application also allow traders to create own account to build a portfolio of stocks and etf securities traded on NASDAQ, NYSE and AMEX exchanges to maximize returns.

3. The application needs the latest data of stocks and etf securities traded on NASDAQ, NYSE and AMEX exchanges.

4. The application needs to visual data with different chart types – line, bar stick.

### Scope:

1. The tool will allow end users to request stock and etf securities and reports, including data analytics across the entire data set available, and visualize all the result data. The project includes functionality for logging use of the system on a user.

2. The administrator updates the latest data end of the day.

3. Get the data from yfinance and store it in database. Read the data from database to display in diagrams.

### Features:

1. Allow users to create and access user accounts for security reasons.

2. Allow users accounts to create and update portfolio.

3. Allow customers to filter, sort data sets, visualize and calculate performance metrics across an entire data set.

4. Allow the user to perform the following visualization features.

A. Compare performance of different securities on same screen

B. Perform interpolation to day, week, month, quarter, year.

C. Display OHLC and intra day prices for any set if assets

Advanced Features:

1. Compare performance against simple trading strategies - MACD

2. Include comparisions against sectors.

## UseCase:

**For Logged-in User:**

create and view portfolios.

**For visitors:**

Register, log

Browse the stock/ETF interface

**For Administrator:**

1. Manage Users：

a. delete user accounts

b. update user accounts

c. add user accounts

2. Manage database:

a. insert data

b.delete data

c.update data

### Tech:

·django

·Angular

·sqlite

## Architecture Diagram

