



# SE Stock League

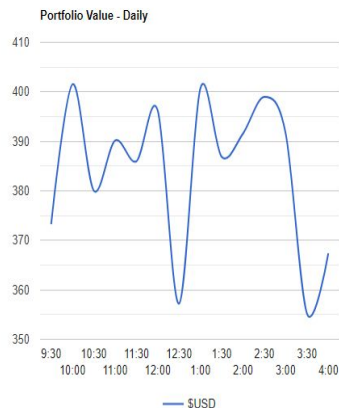
**By: Group 18**

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# Overview

SE Stock League is a web application aimed towards anyone looking to build on their knowledge of investing. Not only can this be used in schools to teach students about investing and the different strategies that can be utilized to have more success when investing, it can also be recreationally by anyone in the world.



# Functions

01 - Leagues

Leagues allow users to begin investing under certain rules made by a league manager, the creator or current leader of a league.

02 - Portfolio

A portfolio page displays the user's current portfolio value along with the portfolio's historic value chart. This page also allows the user to compare his/her portfolio with other stocks or indices.

03 - Achievements

Achievements reward investors for making good decisions and will be used to motivate players to improve upon their investing skills. This page will include the unlocked achievements as well as a section of in progress achievements.



## Functions cont.

### 04 - Candlestick Charts

Candlestick charts will be used to display the recent and past performance of a security. Candlestick charts will display the opening price, closing price, highest price, and lowest price of a particular security.

1. User can gain insight into whether a stock is a bull or a bear
2. Understand what the majority of investors think about the stock
3. Get a approximation of the volume of the stock,
4. Overall gain an in depth understanding of the stock performance in the stock market

# Alpha Vantage

## ALPHA VANTAGE

- ▶ Free APIs in JSON and CSV formats
- ▶ Realtime and historical stock data
- ▶ FX and cryptocurrency feeds
- ▶ 50+ technical indicators

We chose Alpha Vantage as our API for receiving data related to a security's open price, close price, high price, and low price. This information is exactly what is needed for our candlestick charts which is what made Alpha Vantage a perfect match.

### TIME\_SERIES\_INTRADAY High Usage

This API returns intraday time series (timestamp, open, high, low, close, volume) of the equity specified.

#### API Parameters

■ Required: `function`

The time series of your choice. In this case, `function=TIME_SERIES_INTRADAY`

■ Required: `symbol`

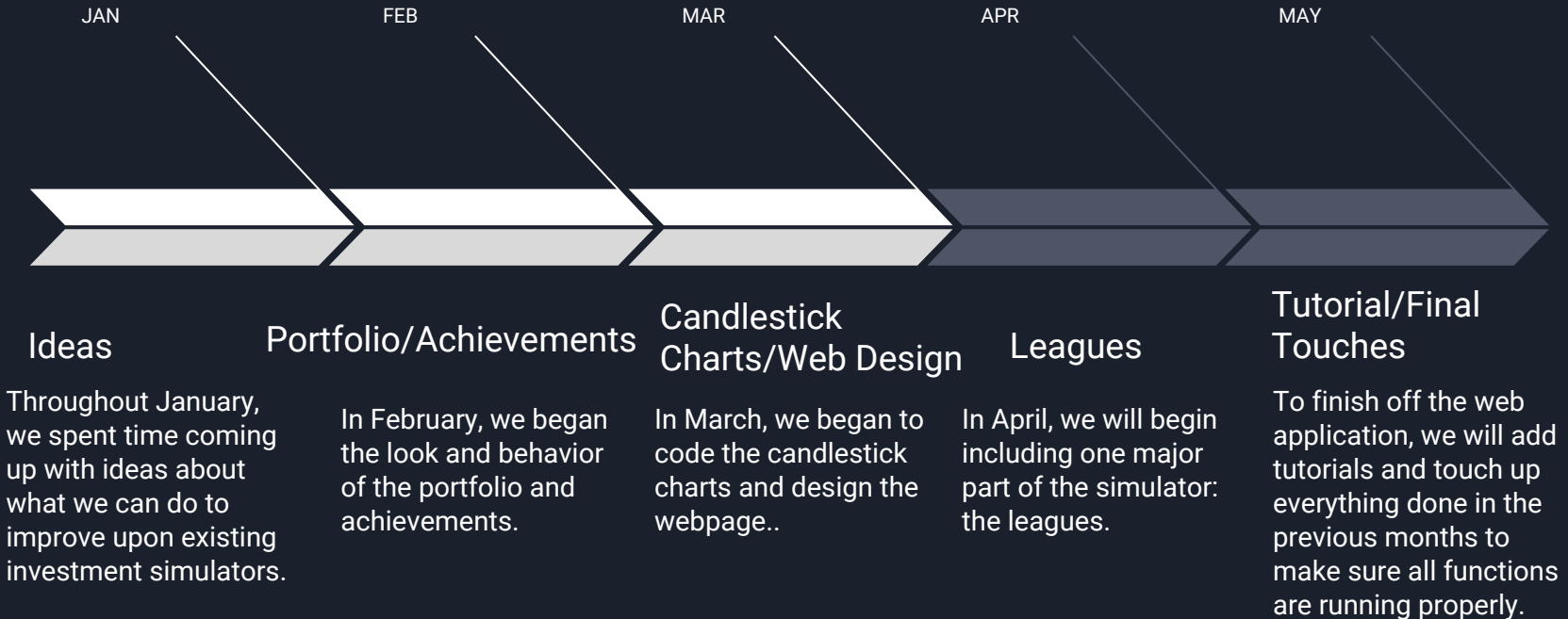
The name of the equity of your choice. For example: `symbol=MSFT`

■ Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`,

`5min`, `15min`, `30min`, `60min`

# Project timeline





Thank you!