Project Structure

Stock Data Gathering

Descriptive Analytics

* Mean;
* Quartiles;
* Range (max-min);
* Standard variation;
* Co-efficient of variation;
* price values; etc.

Visualisations

* Raw time-series; Linear trend lines;
* Moving Averages(e.g. MA(n), with user-selectable n);
* Weighted Moving Averages;
* Moving Average Convergence/Divergence (MACD);
* Regression for predictive

Predictive Analytics

* The user specifies the modelling period (i.e. the training data);
* They also specify a date for which they require a prediction;
* A linear model is built, using the specified period;
* The prediction is produced, along with the model's RMSE and R2 value (co-efficient of determination).

Should:

- “optimise the use of downloaded data to avoid excessive network traffic”

- the possibility of searching for specific stocks

-query specified time ranges, along with associated analysis, such as statistical descriptions of prices and/or volume (mean, median, range, etc),

-technical indicators (https://www.investopedia.com/articles/active-trading/041814/four-most-commonlyused-indicators-trend-trading.asp), for instance:

-Moving averages

-Moving Average Convergence Divergence (MACD)

-Relative Strength Index (RSI)

-On-Balance Volume (OBV)

-visualisation (of the raw data, but also of transformations, such as moving averages), and even basic modelling (such as regression)

-have an easy-to-use text and graphical interface

Notes from Cillian

-download a dataset,

- but ask the user if they want to download a new dataset

-but go find data for them if they want something that is not in the list

-day by day is a good time to download the data