

## **Stock Investment vs Stock Trading and the Implications to the development process of charts and data visualisation**

Trading and investing are all fairly closely associated within the generalised area of the stock market, with this difference affecting bitcoin as well which is the focus of the project at the beginning. However, the group as a development team decided to incorporate both aspects into the projects website for the simulated self-learning service it will provide, therefore, a distinction between the two areas must be clearly identified and sectorised so that a cleaner and more reliable development process can be achieved.

Scenario – A user wants to view the current value of bitcoin.

User story – User navigates to the website. User see's a graph showing the current price of bitcoin.

From this scenario and user story, a developer can see that a user may have multiple reasons for viewing this data as it has multiple implications in the real world. As such, the development of the charts and website in general must take into consideration the uses of such data and the potential outcomes of said knowledge being attained. From current knowledge and research of my own, the main data and its aspects can be represented in the same fashion, a line graph with the live and historical data. However, there is a need to have some difference and it be clearly defined to a user based on the main differences of people's perception in trading, as fault in this could lead to ethical issues if a user incorrectly interprets said data.

Similarities of Investing and Trading:

Both kinds of stock market activity can trade on the same companies, currencies, ETF's but can and will be limited depending on what the trading or investing platform offers as some will have more available than others.

Stock Investment:

Stock investment is the first kind of trading most people who haven't used or been immersed in the market would think of. The stock market is said to have began in the late 16<sup>th</sup> century and as of today works like this: a person or organisation will purchase holding/percentage worth within a company, that person now owns a percentage of the company depending on how many shares were purchased, with the money from the purchase going to the company originally created the stock shares (google, IBM, McDonalds etc). For an individual to make money from this investment the share value of their investment (company shares) must go up and can be sold at any time to get their money back (with potential profit). Stock investing usually utilises a line chart.

Example stock investing platforms:

Freetrade - <https://freetrade.io/>

Robinhood Investing - <https://robinhood.com/gb/en/>

### Stock Trading:

Stock trading is a newer kind of trading where a person or organisation will bet on the market shares rather than purchasing and owning them. The process is completed by someone stating buy or sell, with buy meaning they think the stock price will elevate and gets its name from the fact that at that point one assumes people actually buying stocks will be buying the stock, sell is when someone thinks that the stock price will lower or deescalate and gets its name from people who own the stock will likely be selling it at that point. The 'betting' individual will then be given a price close but not exactly the stock price which will be there bet, with further option following for how long you want to keep the 'bet' and to 'short' at particular events such as going up or down a certain amount. Stock trading usually utilises a candlestick chart.

Example stock trading platforms:

Trading212 - <https://www.trading212.com/>

eToro - <https://www.etoro.com/>

Plus500 - <https://www.plus500.co.uk/>

### How this impacts development:

With these differences in mind, development can and should be planned to accommodate these differences. The main difference will be the charts, with investing using a line chart and trading using a candlestick.

### Decided course of action:

For the very first initial testing a creating of charts to understand and work on the framework, line will likely be the start. However, the first initial implementation should be candlestick when considering developing a system, as it will be easier to implement a lesser system into a bigger system then the other way around. This should then make it so a line chart can be implemented more efficiently later as it has less elements than the candlestick chart.