



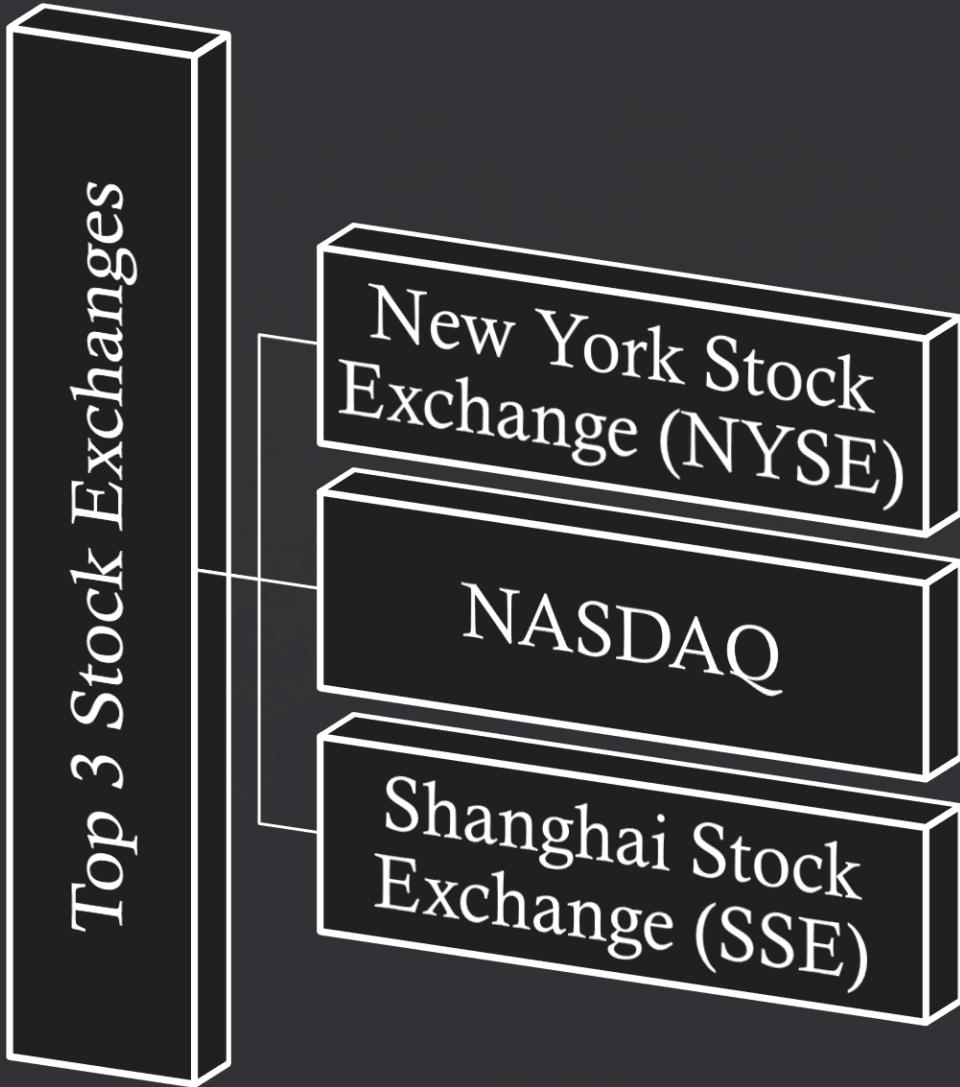
Capstone Project (Stock Investment)

Harison Nagisvaran
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Agenda

- ❖ Background Information
- ❖ Problem Statement
- ❖ Data Set
- ❖ Insights & Findings
- ❖ Recommendations & Conclusion
- ❖ Limitations

Tableau Dashboard



US 27.6
Trillion

Market Capitalization

2800+

Company stocks as of December 2021

Source: Trade Brains

Problem statement

- ❖ Without adequate interpretation & understanding of price movements of NYSE stocks, **novice stock investors** face the possibility of making poor investing decisions.
- ❖ I believe studying and analysing historical stock data is advantageous for them:
 - Build price forecasting algorithms to aid their investment decisions
 - Anticipate stock trends
 - Construct linear regression models
 - Portfolio construction/hedging

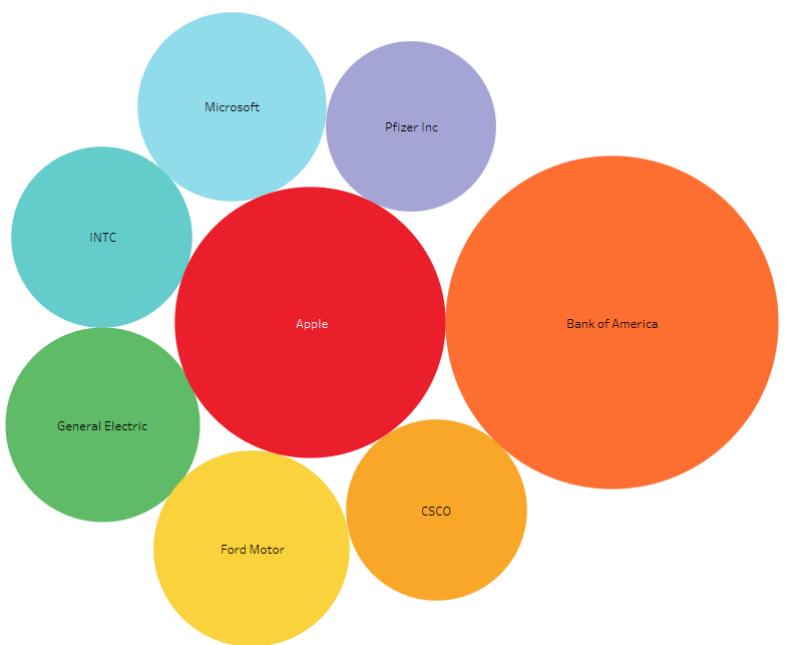
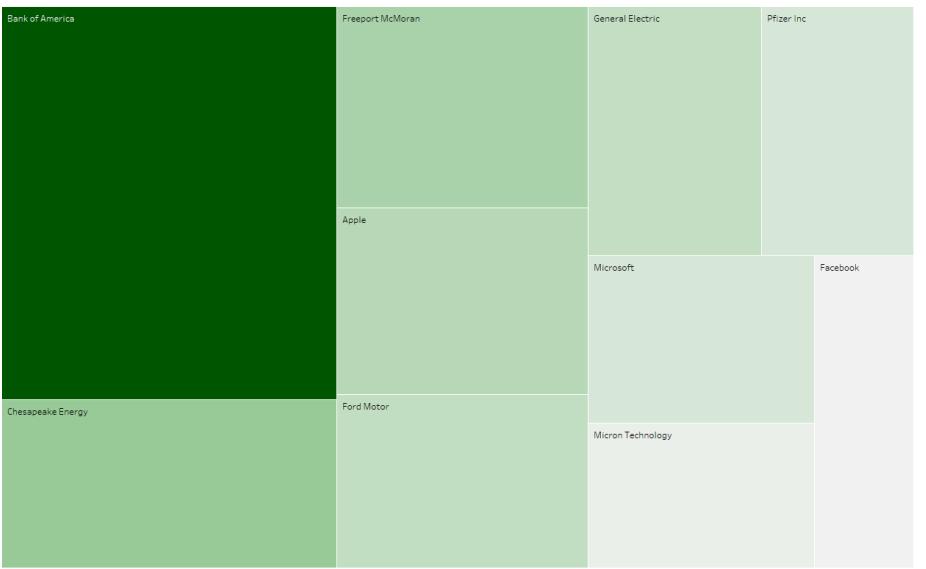


Data Set

- ❖ Obtained from Kaggle & Yahoo Finance
- ❖ 7 Columns: Date, Symbol, Open, Close, Low , High, Volume
- ❖ 500+ Stock Companies from NYSE



	A	B	C	D	E	F	G	H
1	date	symbol	open	close	low	high	volume	
2	5/1/2016	WLTW	123.43	125.84	122.31	126.25	2163600	
3	6/1/2016	WLTW	125.24	119.98	119.94	125.54	2386400	
4	7/1/2016	WLTW	116.38	114.95	114.93	119.74	2489500	
5	8/1/2016	WLTW	115.48	116.62	113.5	117.44	2006300	
6	11/1/2016	WLTW	117.01	114.97	114.09	117.33	1408600	
7	12/1/2016	WLTW	115.51	115.55	114.5	116.06	1098000	
8	13/1/2016	WLTW	116.46	112.85	112.59	117.07	949600	
9	14/1/2016	WLTW	113.51	114.38	110.05	115.03	785300	
10	15/1/2016	WLTW	113.33	112.53	111.92	114.88	1093700	
11	19/1/2016	WLTW	113.66	110.38	109.87	115.87	1523500	
12	20/1/2016	WLTW	109.06	109.3	108.32	111.6	1653900	
13	21/1/2016	WLTW	109.73	110	108.32	110.58	944300	
14	22/1/2016	WLTW	111.88	111.95	110.19	112.95	744900	
15	25/1/2016	WLTW	111.32	110.12	110	114.63	703800	
16	26/1/2016	WLTW	110.42	111	107.3	111.4	563100	



Insights & Findings

- From the dashboard, we can identify the Large Cap US Stocks with **high volume** transactions by year (e.g. Bank of America, Apple, Ford Motor).

For the novice investor, these stocks may present great opportunities for investments if entry is executed properly.

- Additionally, through observing volume transacted, we can identify ideal stocks for ‘Day Trades’ (short-term trading).

For example, Apple and Pfizer stocks where there is high volume of transactions evidently from the data range allow short-term trading opportunities for investors.

Insights & Findings

- ◊ Stock investment involves both Fundamental & Technical analysis.
- ◊ Studying candlestick price action (technical analysis) will be crucial for profitability for the Novice investor i.e. understanding candle structures (body and wicks).



Source: Tableau Dashboard

Recommendations

- ❖ Historical data are invaluable source of information. One is able to derive several conclusions by examining volume, price action and therefore overall trend.
- ❖ With adequate interpretation of stock price action from the NYSE, it enables Novice stock investors to *optimise and enhance their investing methodologies*.
- ❖ Investors are able to identify stocks conducive for ‘day-trading’ (short-term trading) by examining the daily volatility of these stocks.
- ❖ As a further incentive, if investors are able to build strong predictive models from historical stock data, they may derive large financial payoff.
- ❖ In a nutshell, my Tableau dashboard provides a visualization of the price action and trend of 500+ stocks from the NYSE.

Limitations

- ❖ Date range was limited to 6 years
- ❖ NYSE has stocks for some 2800 companies. (Source: ADVFN)
However, only about 500 companies were collected in the data set.
- ❖ Fundamental analysis of stocks was not considered in my dashboard.. Examining company fundamentals are a vital component of stock investment decisions as well.

The End

References

- ❖ <https://www.advfn.com/nyse/newyorkstockexchange.asp#:~:text=Trading%20approximately%201.46%20billion%20shares,to%20new%20high%2Dgrowth%20companies>.
- ❖ <https://tradebrains.in/10-largest-stock-exchanges-in-the-world/>
- ❖ Tableau Dashboard:
https://public.tableau.com/views/CP_Project/Dashboard2?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link