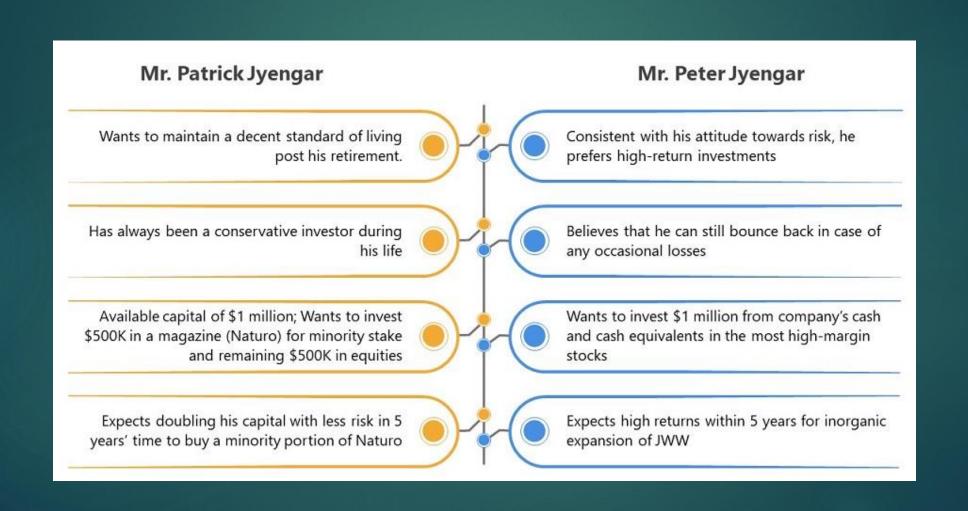
Finance and Risk Analytics

RAMYA SREE NARWA

Problem Statement

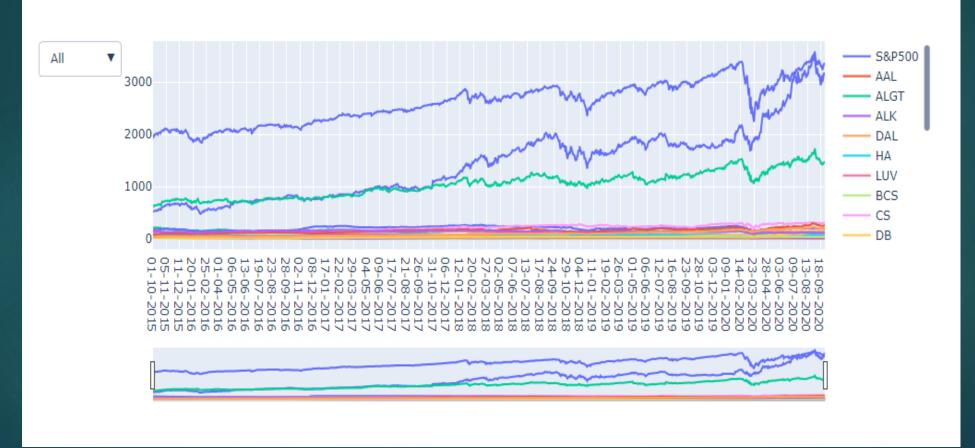
- ► Two different investors, Mr. Patrick Jyenger and Mr. Peter Jyenger needs consultation on investment management based on their requirements and financial objectives by analysing the portfolio of stocks.
- ▶ Information of 24 stocks of leading companies belonging to different domains like Aviation, Finance, Pharma Healthcare and Technology listed in New York Stock exchange from 1st October 2010 to 30th September 2020 are available including S&P500 index prices for the same period.
- ▶ The data from 1st October 2015 is used for the analysis of the stocks.

Profile Summary of the investors



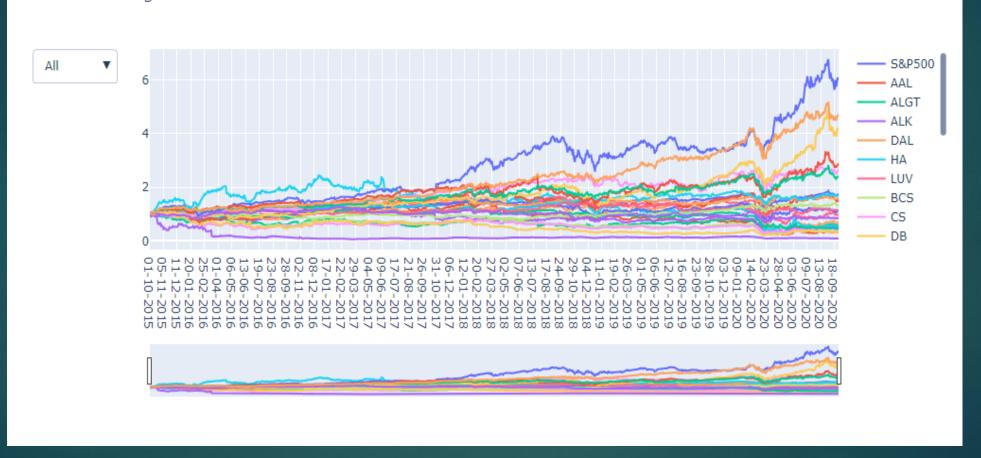
Actual Stocks





Normalized Stocks

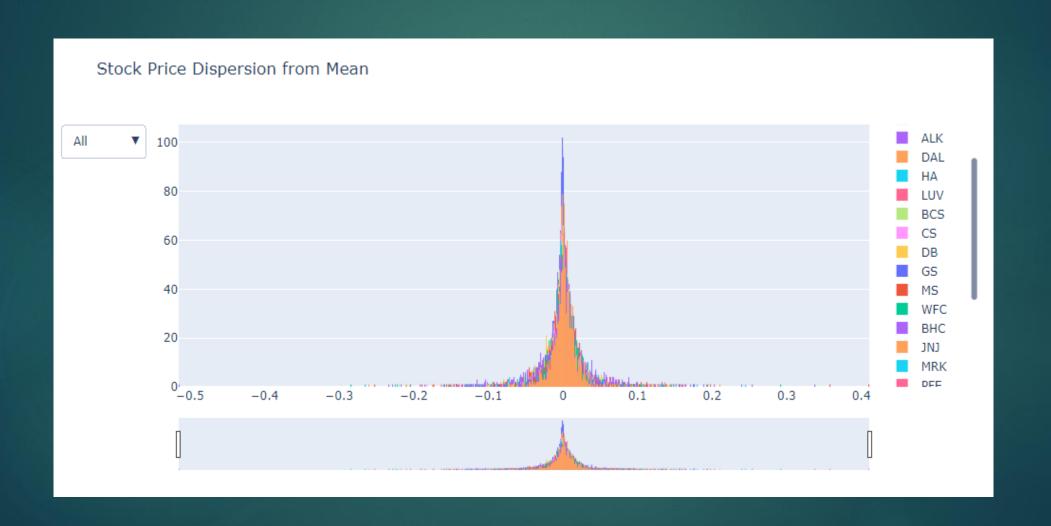
Visualizing Normalized Stock Values



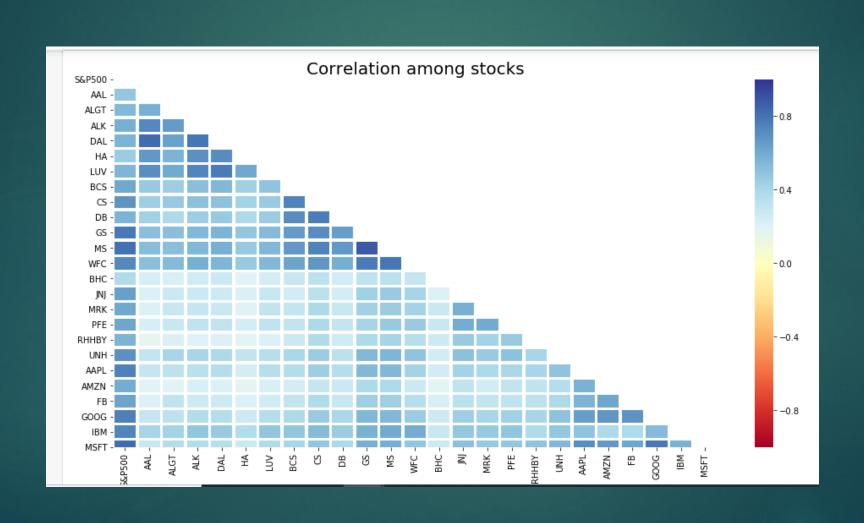
Daily Stock Returns



Stock Risks



Stock Correlation



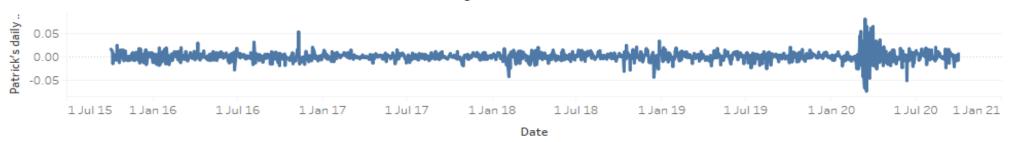
Mr.Patrick Jyenger's Portfolio

Investment = \$ 500,000

Risk = 21%

Returns = \$ 1,214,929

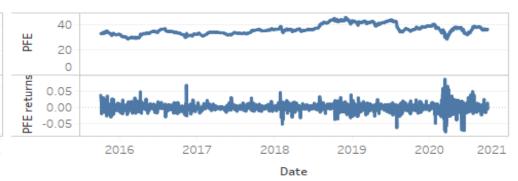
Daily Returns



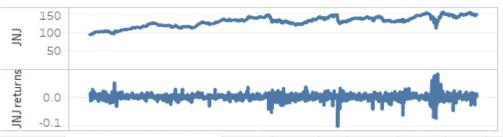
Roche Holding AG

40 20 0 1 1 1 20 1 0.0 -0.1 2016 2017 2018 2019 2020 2021 Date

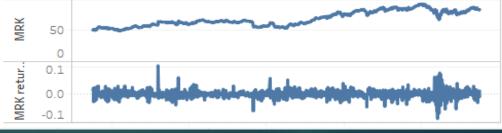
Pfizer Inc



Johnson & Johnson



Merck and Co Inc



Mr.Peter Jyenger's Portfolio

Investment = \$ 1,000,000

Risk = 29%

Returns = \$ 4,824,411

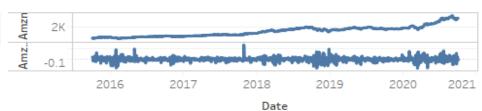
Daily Returns



Facebook



Amazon



Google



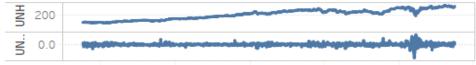
Apple



Microsoft



United Health Group Inc



Thank You