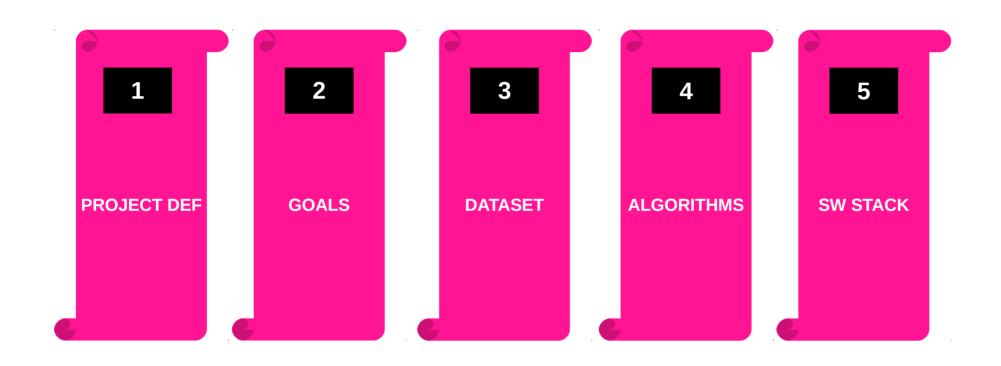
STOCK ADVISOR

Rosario Scalia

Agenda



Project Definition

- Standard & Poor 500 Financial Analysis
- S&P 500 (Standard and Poor's 500) is a free-float, capitalization-weighted index of the top 500 publicly listed stocks in the US (top 500 by market cap).
- Time Series Analysis





Goals

- Extract meaningful insights from data
- Forecast future S&P 500 Indexes





Dataset

- Multi-Variate Time Series Dataset
- 1,769 data points
- Built in 2018 from Data Hub
- Data Points range from 1871 up to 2018





Algorithms

- SARIMA
- Holt-Winters
- Facebook Prophet (2017)

Software Stack

Service	Component
LANGUAGE	<u>Python</u>
ENVIROMENT	<u>Jupyter Notebook</u>
DATASET	<u>Pandas</u>
STATS	<u>SciPy</u> <u>StatsModels</u> <u>FilterPy</u>
GRAH	<u>Matplolib</u>
MATRIX ALGEBRA	NumPy PyTorch















END

Rosario Scalia