first i'd like to thank you all for being here,

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I'm gonna be presenting my final project with stock market sentiment analysis.

My actual study involves querying, free research, nlp and financial data.

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What we’re looking at in this presentation

we'll start off with a brief overview of the project and problem statement

We’ll talk about the methodology and the exploratory data analysis

And finally we’ll discuss the classification and its results by providing some recommendations.

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Market sentiment is a qualitative and evolving technique designed to measure the attitude and mood of investors, and how a group feels about the market economy.

It could be described as the aggregated public opinions, feelings, or outlook that make up the market psychology at any point in time.

Market sentiment becomes essential to distinguish and classify the various factors driving investor sentiments

and furthermore to comprehend their implications on investment decisions.

And ultimately to determine investors’ opinions of a specific stock or asset and how optimistic people are about the current market conditions.

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**Problem Statement**

The problem statement consists of building 3 main tools.

First up We start by providing a sentiment analysis tool on tracking financial articles from different sources.

Next we perform fundamental analysis to identify the trend of the stock price.

And lastly a classification model to gain a meaningful insight by predicting either market sentiment and the future price.

Essentially our end goal is to analyze the impact of sentiment analysis on the stock market by providing a prediction tool capable of predicting and forecasting the stock prices.

**Methodology**

the methodology we've used in the project is divided in 3 steps:

First we start by data management where we collect and scrub our data.

Next we go through feature engineering where we create features from raw data, as well as EDA where we analyze our data to summarize their main characteristics.

and lastly we have modeling and evaluation.

So in terms of hypothesis testing,

I set my null hypothesis to news articles and apple price movements are independent of one another. so specifically beta would be equivalent to be zero.

and my alternative hypothesis was that news articles and apple price movement have a positive association. so in this case we'd have a beta greater than zero.

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What were worked on here in data management, we had a numerous problem to overcome.

The first was the overwhelming amount of news articles to scrap from different financial sources.

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Classification model to gain meaningful insights on predicting both sentiment analysis and furture prices.

Stock sentiment analysis can be used to determine investors’ opinions of a specific stock or asset. Sentiment may at times hint at future price action. This is also an example of how trading psychology can affect a market, assisting as a forecasting tool to determine possible future price changes in a particular asset.

There are various factors that influence stock sentiment, which include news (economic, political and industry related) and social media. These factors help influence stock sentiment as they impact stock market volatility, trading volume and company earnings.

Stock sentiment alone cannot always predict changes in share prices, but when combined with tools such as technical analysis, a better understanding can be gained to determine possible scenarios.

In periods of high volatility, stock prices can be much more susceptible to rapid changes. Certain informational and emotional events, such as negative comments on Twitter/social media and news, may cause fear in the market and push investors to overwhelmingly sell a specific share or company. The opposite can also be true when positive news is released, which may translate into optimism and perhaps boost the price of a given stock. That initial rush of fear or excitement, creating outsized moves in the market can quickly create overbought or oversold conditions.

The term market sentiment, also known as investor sentiment, refers to the general outlook or attitude of investors toward a particular security or the overall financial market. The optimism or pessimism of the market players is most evident in the overall price trends.

Sentiment indicators can be used by investors to see how optimistic or pessimistic people are about the current market or economic conditions.

Market sentiment is a qualitative measure of the attitude and mood of investors to financial markets in general, and specific sectors or assets in particular. Positive and negative sentiment drive price action, and also create trading and investment opportunities for active traders and long-term investors.

Sentiment analysis is also one of the more successful methods of including the effects of market psychology in a trading strategy.

stock market sentiment analysis, is an evolving technique designed to represent how a group feels about the market economy.

the stock market is one of the most sensitive field, where sentiment of people can change the trend of the entire market.

market sentiment is a qualitative and evolving technique designed to measure the attitude and mood of investors, and how a group feels about the market economy.