Project Proposal:
Stock Prediction Using News Headlines

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Question

What kind of impacts do recent news events have on different areas of tech stocks and can we use this for predictive purposes for the stock prices of these companies? We will only be focusing on few specific companies within the technology sector such as:

1. Social media: Facebook, Twitter
2. E-commerce: Amazon, eBay
3. Ride-share: Uber, Lyft
4. Entertainment: Netflix, Spotify

Goal

There are currently many news events that have the potential to influence the stock market, including the COVID-19 pandemic and the upcoming election. Especially during the past few months, there has been a rise in the U.S. tech stocks. The goal of this project is to analyze how news events have influenced certain sectors of tech stocks, and identify a trend to predict future movements of stock prices for these sectors.

Dataset

For this project, we will be using data from eight stocks in the tech industry that fall under the different sub sectors we listed above. We will get their stock information from YahooFinance. Additionally, we will be analyzing news headlines via https://finviz.com/news.ashx. This website also allows us to filter news by ticker, so it will help us filter news headlines pertaining to the specific stocks we selected.

Project Value

We believe that this project is important because there have been many significant events in recent months that have the potential to influence the stock market. The stock market within the tech industry has been booming, so our goal is to examine if there are key news events or announcements that have the ability to influence prices (positively or negatively) for specific stocks and sectors in the tech industry. Therefore, it is relevant to assess which sub sectors of the tech industry are experiencing the most movement, if any, based on news headlines, so that we can predict future movements of stock prices and implement a profitable trading strategy that could outperform the market.