

Eshita Jain

Professor Ryan

CS 110

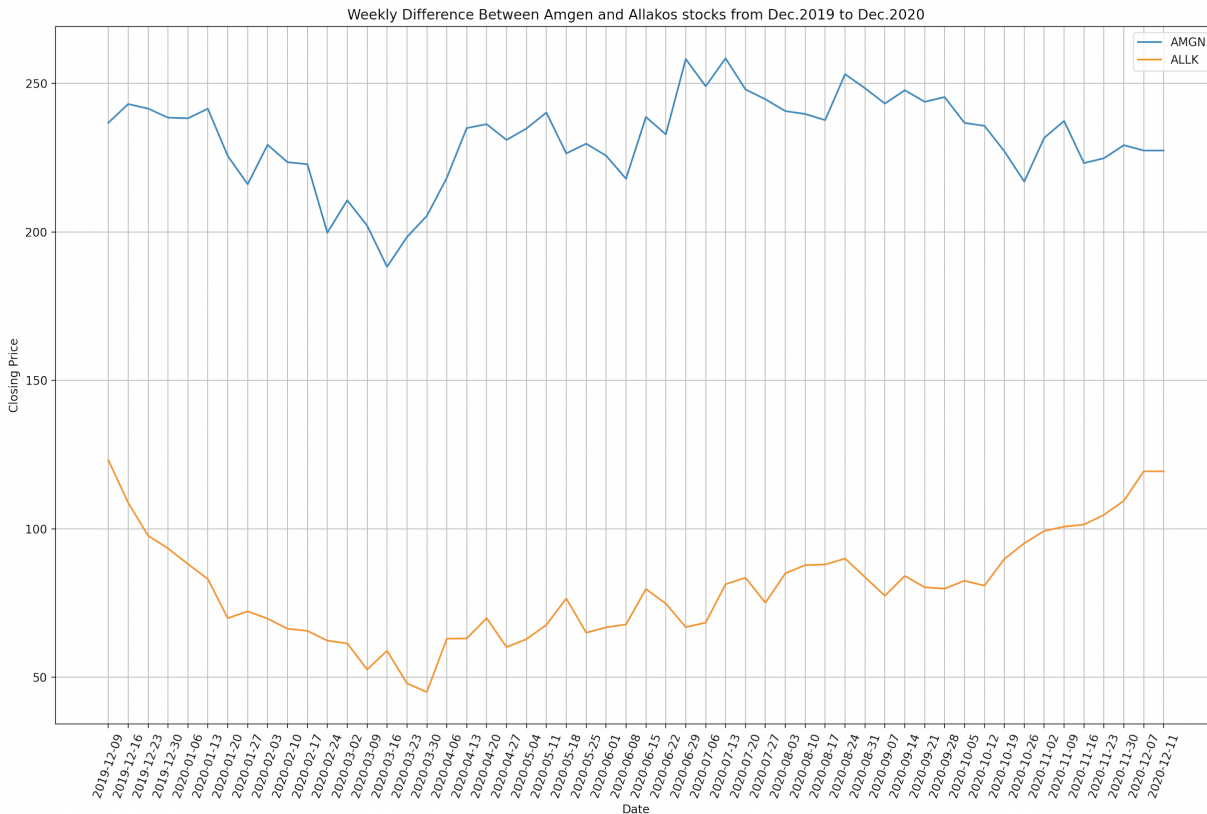
December 13th, 2020

Final Project Report

Section 1: “Overview and Summary of Project.”

In early December, Nasdaq released new requirements for companies wishing to remain listed on the index. These requirements require companies to include women, racial minorities, and LGBTQ+ individuals on their boards, in an effort to bring diversity to U.S. Corporations. Currently, very few companies fulfill this requirement; Out of more than three thousand companies listed on the Nasdaq, less than thirty percent currently meet the new requirements. I wanted to plot two stocks of companies from the same sector listed on Nasdaq; one company that already met the requirements and one that did not. After a lot of research, I found two biotechnology companies- Amgen, which met the requirements, and Allakos, which did not. By plotting the two stocks on the same graph, users would be able to tell how much of a difference having a diverse board really makes. Users are tested on their knowledge of this new requirement. Based on their answers, they are given feedback before they view the graph.

```
/Users/eshitajain/PycharmProjects/pythonProject26/venv/bin/python /Users/eshitajain/PycharmProjects/pythonProject26/main.py
Are you aware of Nasdaq's recent Diversity Requirements?
Enter 'Yes' or 'No': Yes
Have you heard of the two biotechnology companies Amgen and Allakos?
Enter 'Yes' or 'No': Yes
Which company do you think currently meets Nasdaq's New Diversity Requirements?
Enter 'Amgen' or 'Allakos': Allakos
Sorry, that is incorrect. Allakos has an all-male board of directors. Let us take a look at the difference in their stock prices.
We will see whether or not having a diverse board of directors is beneficial for companies.
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Section 2: “Target Audience.”

The target audience for this program includes members of any company who do not see the clear benefits of having a diversified board of directors. Women, minorities, and members of the LGBTQ+ community who are vying for a position on the board of directors can also use this program to show part of what they can bring to the company.

Section 3: “Specific Programming Techniques Used.”

In this program, I used the matplotlib.pyplot library, which was necessary in order to visualize the plotted data. I also used if-elif-else statements to gain user input. I pre-loaded two CSV files into the programming, which were read after CSV was imported into the program. This program also utilizes lists, some of which are empty. Based on the data collected from user input, the graph was always plotted in the end.

Section 4: “Challenges.”

One of the main challenges in creating this program was finding two companies from the same sector, one that already met the requirements and one that did not. It was imperative to me that they belonged to the same industry because comparing two companies from different sectors would not be as effective in proving how diversity is beneficial. Another challenge was allowing users to input more options, other than a rigid “Yes” or “No.” Anytime I tried using an “or” in my “if” statement, the program would not run correctly. Furthermore, I originally wanted to use daily returns in the graph. However, since the 365 dates did not display nicely, I resorted to using weekly returns instead.

Section 5: “Future Extensions.”

Once companies comply with these new requirements, I want to see the difference before and after they have a diverse board of directors. For instance, users could enter a company listed on the Nasdaq and the program would show a graph with one line that shows the company’s performance without a diverse board and one line that shows the company’s performance after. A program could also be made that graphs the Nasdaq index itself, showing one line representing the time before companies complied with the new requirements and one line showing the index after every company has a diverse board of directors.