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Final Project Report: Expanded Chatbot

For the final project, I chose to expand on the mini chatbot project. This time around, I decided to make a chatbot with a focus on the stock market. Warren Buffbot is a multifile chat bot that displays company summaries and financial/technical analysis information for any company in the Dow Jones Industrial Average. When asked for a company summary, the bot navigates to the Reuters url for said company and parses the html code to scrape the relevant body text. To get the financial/technical analysis information, I opted to automatically open the finviz.com web page for the specified company. This web page contains important financial ratios, news, and a chart with support, resistance, and trendlines that an active trader might find useful to glance at. If you aren’t sure what companies are even in the Dow Jones, you can input ‘tickers’ into the prompt and a table with all the companies and ticker symbols in the index display in the console. When you run the program, an introduction and instructions for the use of the chatbot will also display in the console.

I had to make a few changes to the original code in order to make this work. First, I had to define a function to scrape the summary text. Next, I had to edit the response function slightly to get it to work with my if statements (I added a flag2 value so that I could signify which response to output in some of my if statements). I changed the personality to fit with the overall stock market theme. I also made few structural changes to the if statements contained within the while loop to accomplish the objectives of the chatbot.

This was a very informative project overall. I have never scraped a webpage before, so I gained a very useful skill that I will be able to use going forward, along with the use of the chatbot machine learning code. This class has been a lot of fun. You’re videos are very engaging and easy to understand. I appreciate the time and effort you have put in to educate us!