CMPSC 383
Multi-Agent and Robotic Systems
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Pledge:

I propose creating a stock market bot for the final project in the multi-agent and robotic systems course. To ensure that this is feasible, I will choose one stock to follow and will only simulate the buying and selling of that stock. I will have one agent responsible for collecting and providing the information about a stock. Additionally, this agent would be the one in charge of actually buying and selling the stock if it were to be actually employed. The other agent is more intelligent and would be repsonsible for determining whether it was a good time to purchase more of the stock, or better to sell shares of that stock at a given time. The intelligent agent would be polling the agent responsible for knowing the information about the market. I will use the simple moving averge to determine whether it is a good time to buy or sell the stock. This average is calculated by looking the the day ending prices for an arbitrary number of days. Based on this average, I will also use some thresholding to determine whether the average is decreasing enough to buy more or if it is high enough to sell. This (`https://goo.gl/uevRi8`) link describes ways to use the simple moving average to buy and sell stocks in more detail. In the article they talk about the number of days that should be considered if using the moving average as a reference to buy and sell. They suggest using one of the following number of days for the simple moving average calculation: 5, 10, 20, 50, or 200. There are other moving average such as the exponential moving average than can also be considered. Due to strict time constraints, this moving average will only be considered if there is time.