Project Goal:

The main goal is to derive stock metrics from Yahoo Finance API in order to determine whether or not it is a good idea to buy said stock.

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Why is the Project Important?

Tell people what stock to buy.
Give objective analysis and teach people about the metrics of stocks, what they mean, what are the most significant indicators for stocks.
Serve to warn investors about the perils of fluctuant stocks.
Employing the use of Artificial Intelligence in highlighting stock market trends.
Provide a comparison as to how day traders and AI can produce different results while given circumstances.

Steps Required

1. Understand the application deep reinforcement learning,
2. Learn Neural networks
    a. Objective learning, back propagation
3. Apply learning to some small scale project to get full understanding
4. Use Yfinance API to derive stock statistics
5. Use stock statistics to train DRL model
6. See the predictions made by the model and how it does in real time
7. Update the model as we go along in order to be more consistent
8. Develop a user interface to take user stock input, relay information about the stock and advise whether to buy, sell or hold said stock.

Technologies

Python (Open AI Gym, Anytrading)
Yahoo Finance API
    - Derive stock metrics and data
Flask
    - Web App
AWS (deployment)