Project Blueprint

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Optimizing Stock Trading Strategy using the Reinforcement Learning

1..Import raw data from Yahoo Finance using the Y-finance API,

2.The data should then be converted to a Proper Fielded Dataframe.

3.Data cleaning consists of removing null values and irrelevant values from the data.

4.Transforms raw data into an understandable format

5.Data Standardization

6.Exploring the data by plotting graphs and finding the out liars.

7.We explore and compare the potential of three reinforcement learning algorithms

a.Q-learning

b.Hill climbing

c.Deep Q-learning

a.Q-learning:-

Q-learning is a model-free reinforcement learning algorithm to learn the value of an action in a particular state.

b.Hill climbing:-

It is an iterative algorithm that starts with an arbitrary solution to a problem, then attempts to find a better solution by making an incremental change to the solution.

c.Deep Q-learning:-

Using a neural network to approximate the Q-value function. The Qvalue function creates an exact matrix for the working agent, which it can “refer to” to maximize its reward in the long run.

8.Testing the model on the Test dataset and evaluating the accuracy of the model on the unseen data based on that Improvising the Model by using another Techniques

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