Stock Price Predicting Rubric

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General Description:

You will build a time series analysis model to estimate the stock price, using the datasets given or any other additional information you find.

Why am I doing this?

This assignment will provide you with a basic introduction to time series analysis, including the ARIMA model and/or other time series models. Additionally, you will become familiar with GitHub, which is widely used in data science, computer science, and other fields. Finally, you will gain experience in producing a comprehensive project that includes not only data cleaning and model analysis but also organizing all your work so that others may use or reproduce your project.

What am I going to do?

First, read and understand your task. Then, go to GitHub to find the code file and datasets. If you prefer to use your own datasets, you should find and clean them properly. You should use closing price to build the trend and prepare for model. Next, build your model based on a train and test strategy. After that, record what you've done and explain your results thoroughly (how your model is behaving). You may use RMSE value or other criteria to evaluate the performance of your model.

Tips for success:

- Ask for helps when you need.
- Read through the provided code
- Research online.

How will I know I have succeeded:

Spec Category	Spec Details
Formatting	One GitHub Repository The top level page of the repository should contain: • A README.md file (which auto displays) • A LICENSE.md file (use MIT as default) • A SCRIPTS folder • A DATA folder • AN OUTPUT folder • A written PDF (not required)
README.md	Briefly summarize what you've done for the case study. Provide enough information to guide others to your repository.
SCRIPTS folder	This folder contains all the source code for your project. In the source code, clearly explain each chunk/line of code: what variables you used, what result you want to attain, etc.

OUTPUT folder	This folder contains all of the output generated by your project, e.g. figures, tables, etc.
Written PDF	Summary: provides a brief overview of the stock data, analysis model, and results obtained from the study. Data: One paragraph discusses the data utilized in the analysis, including key variables, and outlines the data cleaning process. Analysis One paragraph to illustrate the chosen model for analysis. Results: A brief discussion of the obtained results and provides justification for their accuracy. Reflection: one paragraph reflects on potential improvements to the analysis methodology and highlights any challenges encountered during the study.
References	• All references should be listed at the end of the document • Use IEEE Documentation style (link)