## **INFO 4150E – Mini Project 3 instructions**

## **Project**

Google stock price forecasting application. Dataset provided – "GOOG\_08\_04\_10\_19.csv". It has about 15 years of data.

## **MP3 Tasks**

- 1. Prepare the data for feeding to the pre-defined LSTM model as instructed in the Jupyter Notebook provided. If the data prep is done correctly, the rest of the code will run to the end. It is set to run for 10 epochs and depending on your computer it may take up to 30 mins. My suggestion would be to run it for 1 epoch to start with and if everything works, change it to 10 epochs.
- 2. Explain in detail, in a word document, what the different cells, in the already prepared exercise, are doing programmatically and conceptually. It needs to be insightful enough so that I can conclude that one has really understood all the workings. Try to give the explanations cell wise. As an example, in the cell where the model is developed, explain the structure developed and how it would work. Structure your word document such that it is easy for me to follow.
- 3. Using the model developed, predict for future values as instructed. There is one part of the code where you can specify how many time steps into the future you want a forecast for. It is set to zero to start with. Identify where it is and set it up to a value not greater than 10.

## **Deliverables**

- a. Jupyter Notebook with a running version of the application. Please change the filename to your First and Last Names.
- b. Word document with all the tasks mentioned above completed.
- c. In the same word document, after completing the tasks assigned, please give me feedback on the following questions: (not a part of your grading)
  - i. What was your biggest takeaway from this course?
  - ii. What do you enjoy most about this course?
  - iii. What one thing can be done better to improve the delivery of this course?
  - iv. Do you plan to pursue a career in data science?

The project due date is not later than July 29<sup>th</sup>, 2022, by midnight.