Portfolio Assignment: Text Classification

Objectives:

- Gain experience with Keras
- Gain experience with text classification
- Gain experience with deep learning model variations and embeddings

Turn in:

- This program should be created in a notebook (Jupyter, Google, or Kaggle)
- Print to pdf and upload your pdf to eLearning and your Portfolio

Instructions:

1. Go to Kaggle.com. Find a text classification data set that interests you. Divide into train/test. Create a graph showing the distribution of the target classes. Describe the data set and what the model should be able to predict.
2. Create a sequential model and evaluate on the test data
3. Try a different architecture like RNN, CNN, etc and evaluate on the test data
4. Try different embedding approaches and evaluate on the test data
5. Write up your analysis of the performance of various approaches

Grading Rubric:

- Each part is worth 0 to 20 points
- Your grade is not determined by the accuracy achieved, but by how much work and thought you put into it