UDACITY

PROJECT SPECIFICATION

Deploying a Sentiment Analysis Model

Files Submitted

CRITERIA	MEETS SPECIFICATIONS
Submission Files	The submission includes all required files, including notebook, python scripts, and html files.

Preparing and Processing Data

CRITERIA	MEETS SPECIFICATIONS
Question: What does review_to_words do?	Answer describes what the pre-processing method does to a review.
Question: What are the five most frequently appearing words?	Notebook displays the five most frequently appearing words.
Create a word dictionary	The `build_dict` method is implemented and constructs a valid word dictionary.
Question: Understanding	Answer describes how the processing methods are applied to the training and test

Understanding `preprocess_data` and `convert_and_pad_data`	methods are applied to the training and test data sets and what, if any, issues there may be.

MEETS SPECIFICATIONS

Build and Train a PyTorch Model

CRITERIA	MEETS SPECIFICATIONS
Writing the training method	The train method is implemented and can be used to train the PyTorch model.
Training the model	The RNN is trained using SageMaker's supported PyTorch functionality.

Deploy a Model for Testing

CRITERIA	MEETS SPECIFICATIONS
Deploy the trained model	The trained PyTorch model is successfully deployed.

Use the Model for Testing

CRITERIA	MEETS SPECIFICATIONS
Question: How does this model compare to the XGBoost	Answer describes the differences between the RNN model and the XGBoost model and how they perform on the IMDB data.

CRITERIA	MEETS SPECIFICATIONS
model?	
Process the test review	The test review has been processed correctly and stored in the `test_data` variable.
Writing inference code	The `predict_fn()` method in `serve/predict.py` has been implemented.

Deploying a Web App

CRITERIA	MEETS SPECIFICATIONS
The web app is deployed	The model is deployed and the Lambda / API Gateway integration is complete so that the web app works (make sure to include your modified `index.html`).
Question: Give an example review and response	Answer gives a sample review and the resulting predicted sentiment.

Suggestions to Make Your Project Stand Out!

(1) MAKE A BETTER WEB APP

The web app that you make in this project simply reports to the user whether the predicted sentiment was positive or negative. Can you think of a better web app that uses the same model?

(2) IMPROVE THE WEB APP APPEARANCE

The provided web app is very simple and there is plenty of room for improvement if you wish to stretch your web developer skills.

(3) IMPROVE THE MODEL

The model chosen here is a straightforward RNN with a single hidden layer. There are many different model architectures that you could try to see if they improve the results.