Sentiment Analysis of Amazon Reviews
Using Text Classification

Objective:
Using Natural Language Processing (NLP) we will be solving a sentiment analysis or text classification problem. We will take advantage of an existing Amazon Reviews dataset as the data source. The project will ultimately allow users to send Character Large Objects (CLOBs) to a remote Web Service application programmable interface (API) in the Amazon Web Services (AWS) Cloud. The Microservice will then provide real-time sentiment analysis prediction over the Internet.

Background:
The Amazon Reviews dataset provides historical customer reviews of various products that were purchased on the platform. The sentiment analysis model will provide a binary classification of the review as either positive or negative. Utilizing linguistic technologies like tokens, parts of speech (POS) tagging, and lemmatization we will perform feature engineering techniques to produce feature vectors to train the machine learning (ML) model.

Data Science and Exploratory Data Analysis (EDA) Platform: Miniconda/Jupyter
Cloud Computing Platform: AWS
Dataset: https://www.kaggle.com/code/poonaml/text-classification-using-spacy