Analyzing Tweets: Positive or Negative

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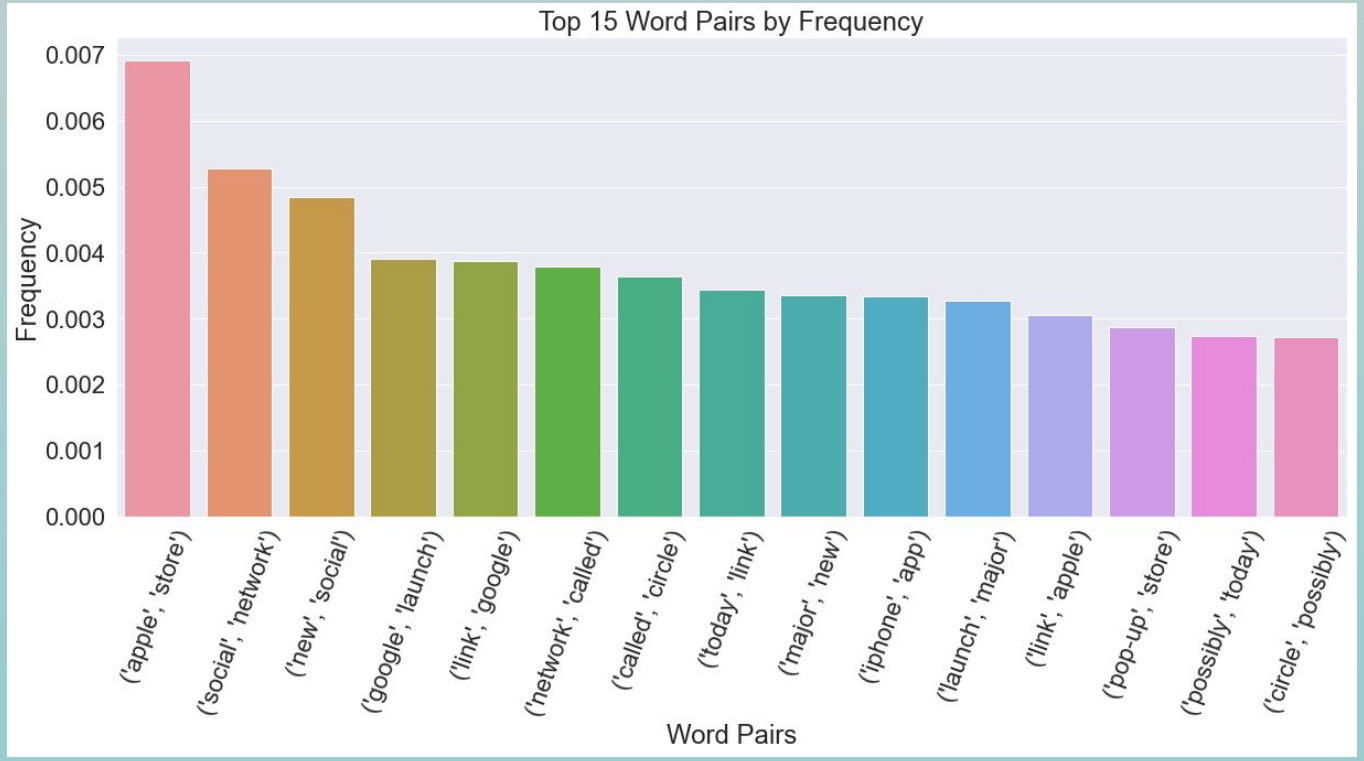
Purpose

Build a model that, when given an input tweet, can predict whether that tweet has a positive or negative sentiment.

Insights from Tokenization and Bigrams



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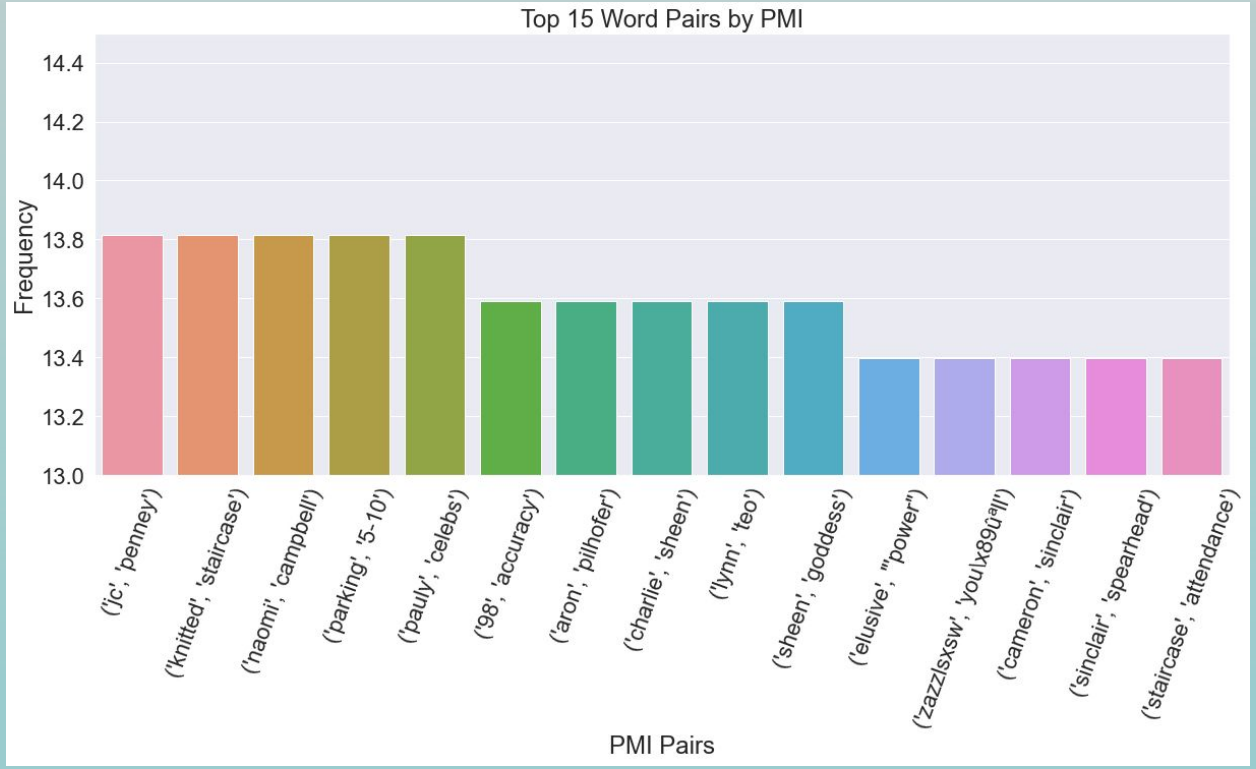

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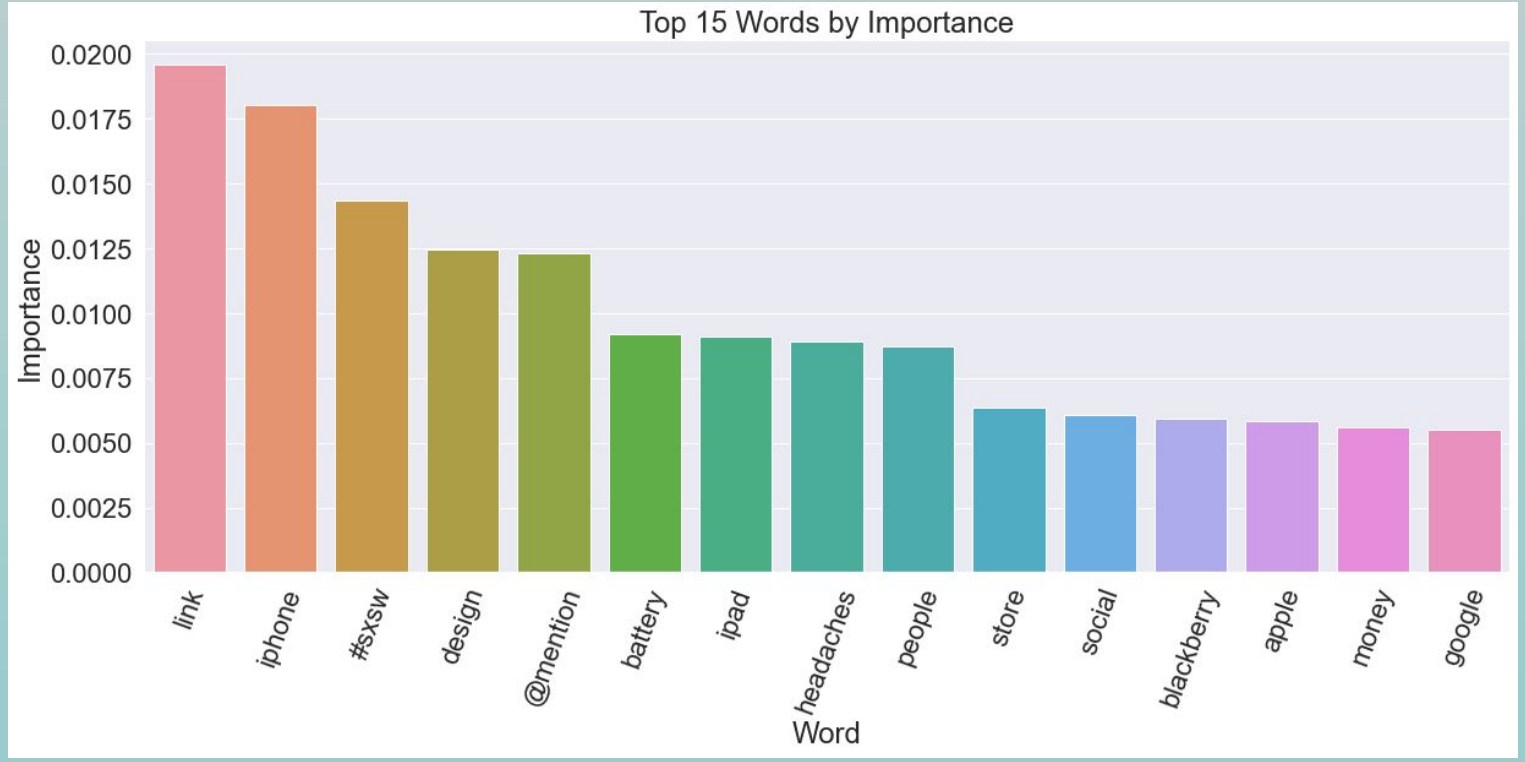
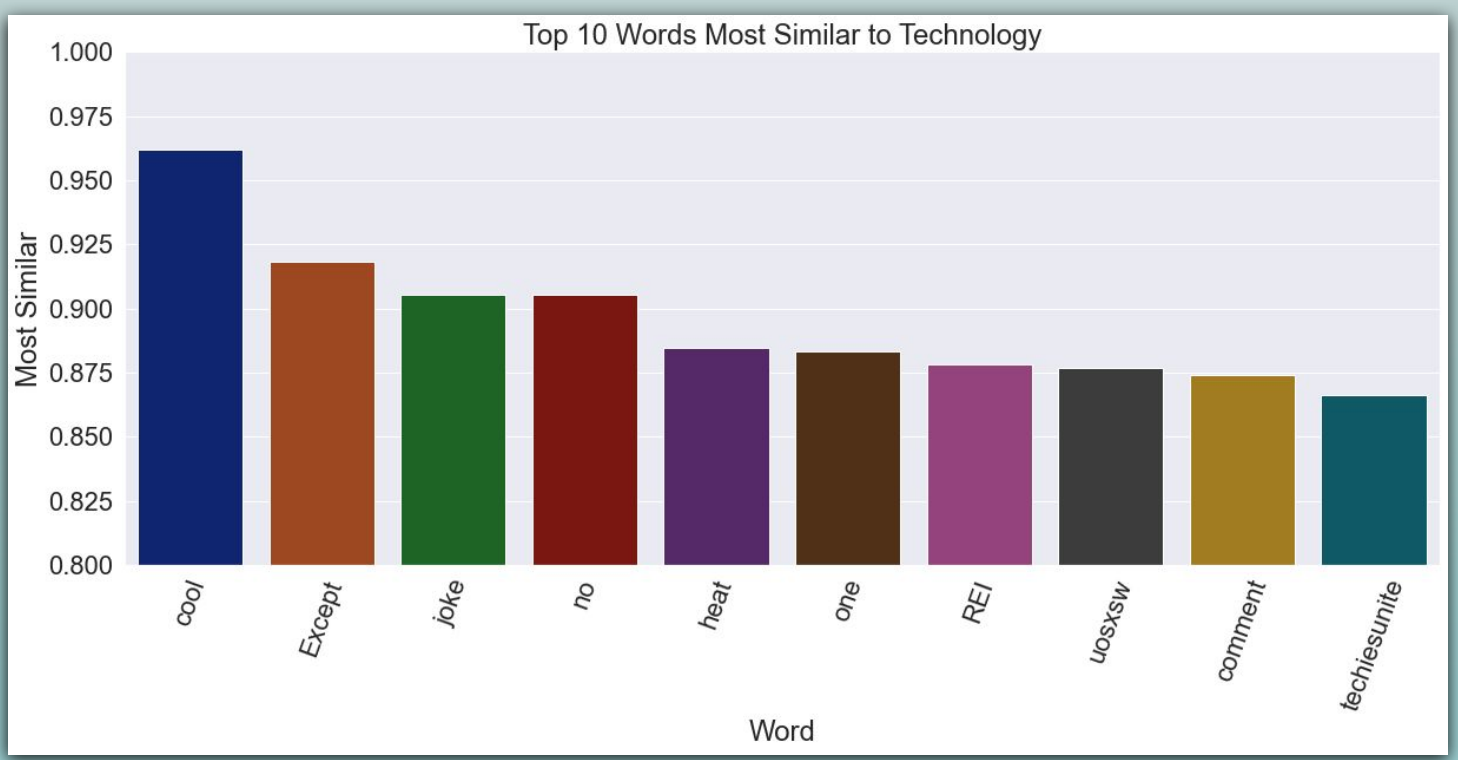


Insights using Word2Vec



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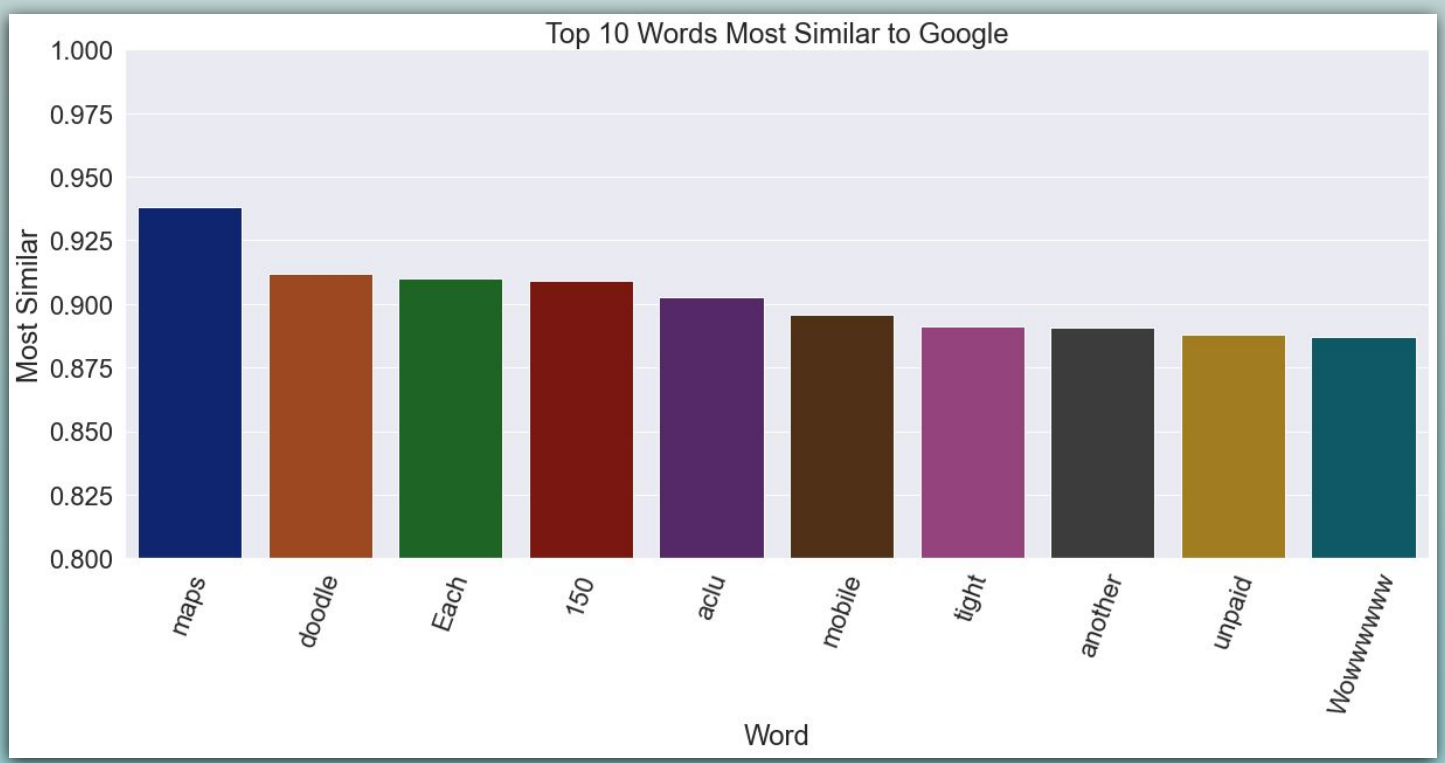

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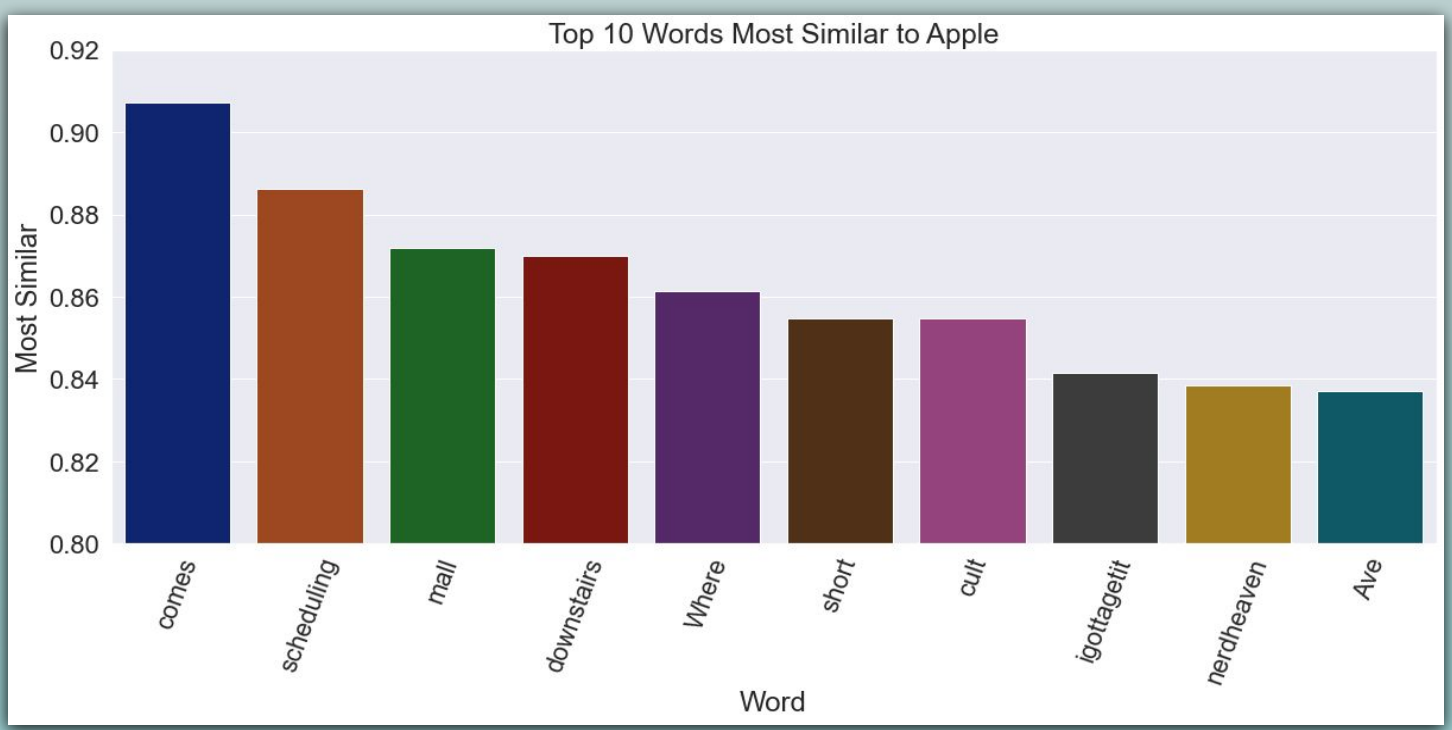
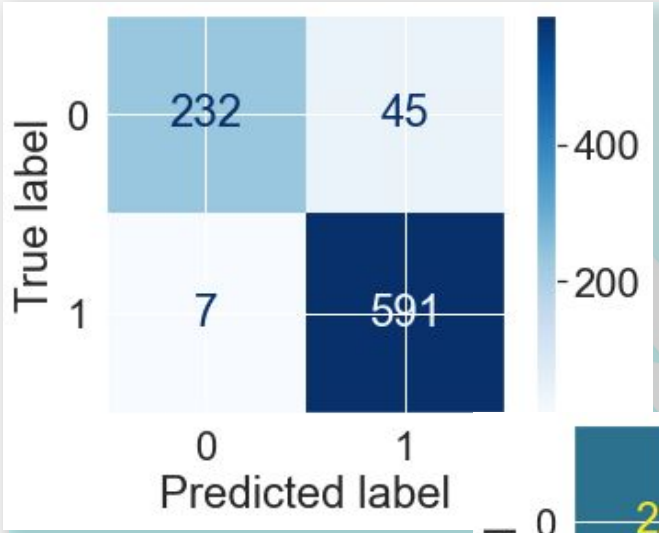
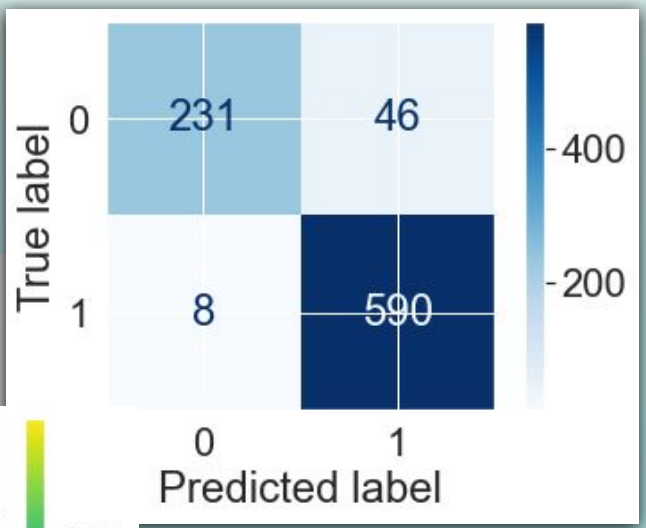
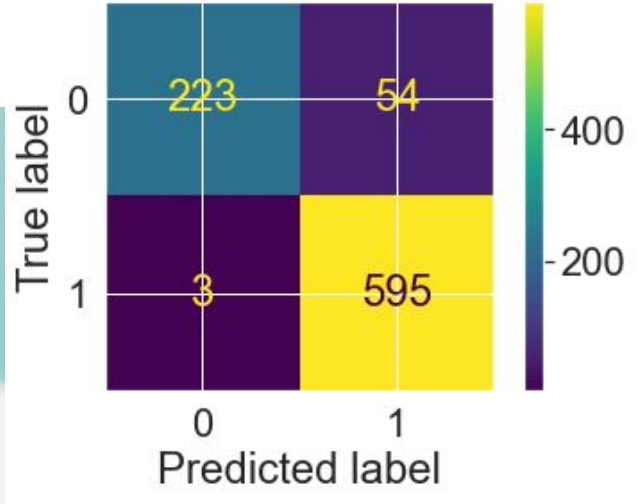


Overall Insights - Supervised Learning

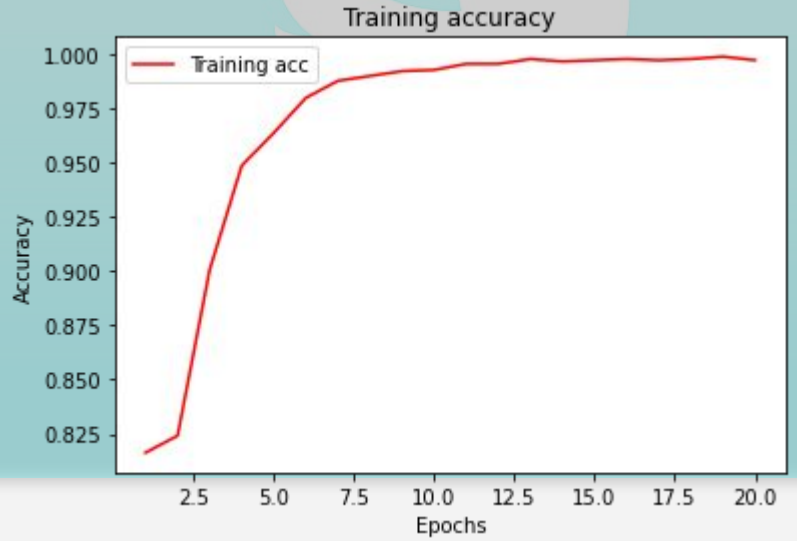






Overall Insights - Unsupervised Learning

- Using a multiclass classification sequential Deep Neural Network model, achieved 81.5% (99.8% training accuracy) accuracy on the test data for 4 classes of Tweets -
- Ambiguous
- Negative
- No emotion toward brand or product
- Positive



Future Work

- Separate iPhone OS and Android OS tweets to look at different behaviors and word usage of those two groups
- Use Spacy NLP to look at Parts of Speech tagging of the bag of words
- Explore which words have the most positive and most negative connotations in tweets


Thank
You!