

## Problem

- How has the public opinion and perceptions of Taylor Swift changed over the years?
- Solution: sentiment analysis with natural language processing!

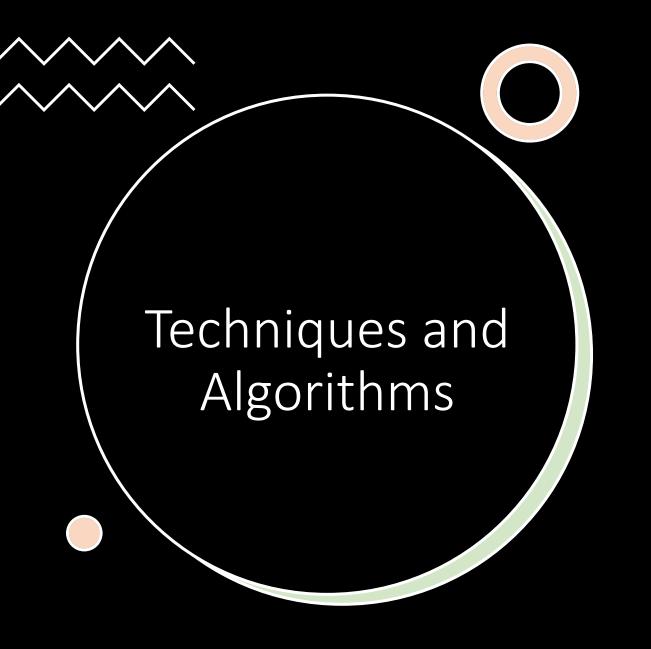
## Scope

## In-Scope

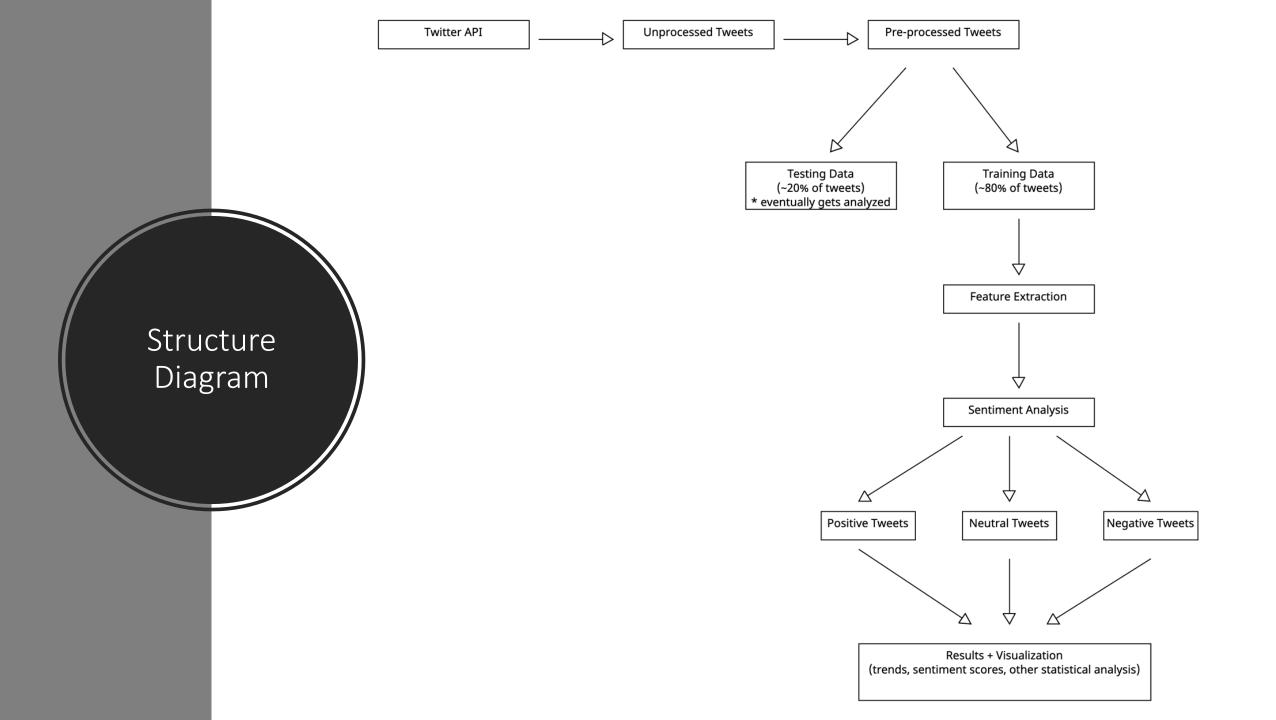
- Collect and pre-process Tweets about Taylor
- Perform sentiment analysis
  - Classifying tweets as positive, negative, or neutral
- Visualizations of model performance and data trends

## Out of Scope

- No Taylor Nation tweets
- Not separating the fans vs the public vs anti-fan classification



- Data collection
  - A library that accesses the Twitter API such as Tweepy
- Pre-Processing and feature extraction
  - Natural Language Toolkit for Python (can do tagging and parsing)
- Sentiment Analysis
  - Naïve Bayes model. Alternative is Support Vector Maps
- Model Evaluation
  - Metrics like accuracy, precision, and f-score
- Results Visualization
  - Matplotlib and/or an interactive dashboard
- Jupyter Notebook





Thank you for your time!