

YELP CAFE REVIEWS USING NLP

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CONTENT OUTLINE

- Introduction
- Data
- Data Preprocessing
- Expolarity Data Analysis
- Topic Modeling
- Sentiment Analysis
- Recommendation system
- Conclusion



INTRODUCTION

- Build a system that can detect the sentiment of cafe reviews
- Offer similar cafes to the favorite one through the development of a recommender system.

DATA DESCRIPTION

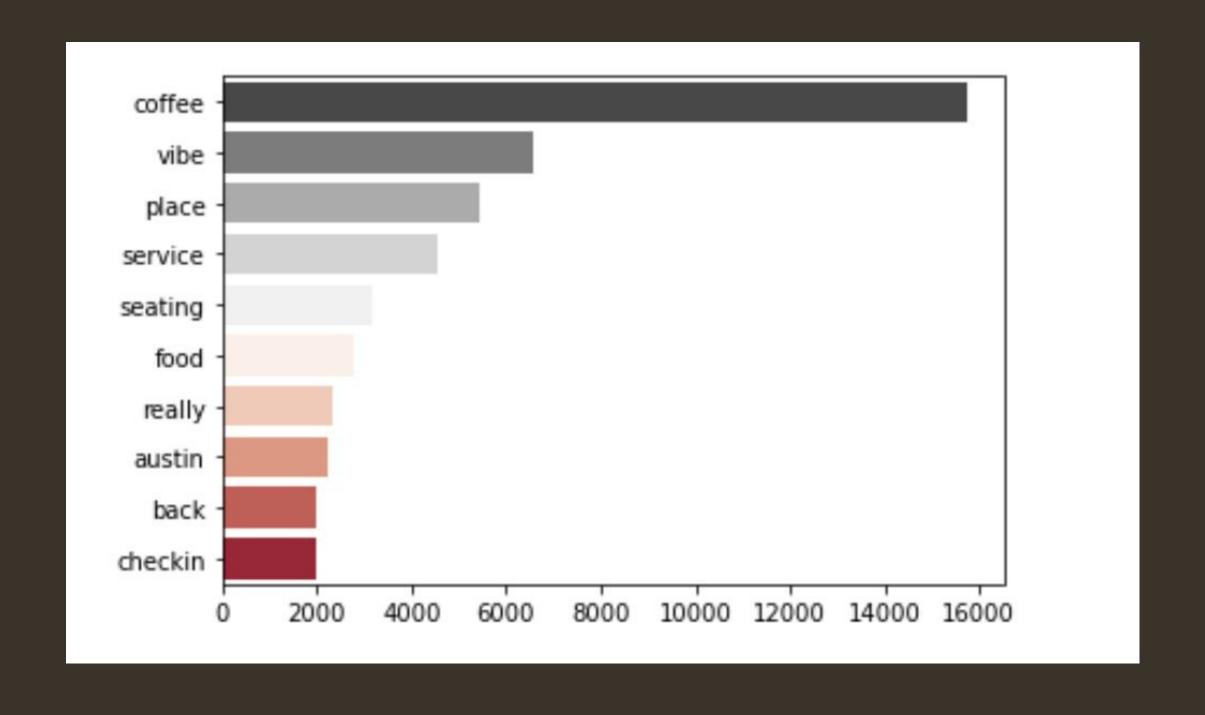
- Provided by Kaggle.
- Consist of nearly 7,000 observations and 20 features.
- Important features were selected.



Stop Words Removal DATA PREPROCESSING **Punctuation Digits Removal** Removal Lemmatization **Tokenization**

BAR PLOT

 Shows Top frequent words in the reviews



WORD CLOUD PLOT



TOPIC MODELING



The use of TF-IDF with LSA



3 Topics were selected



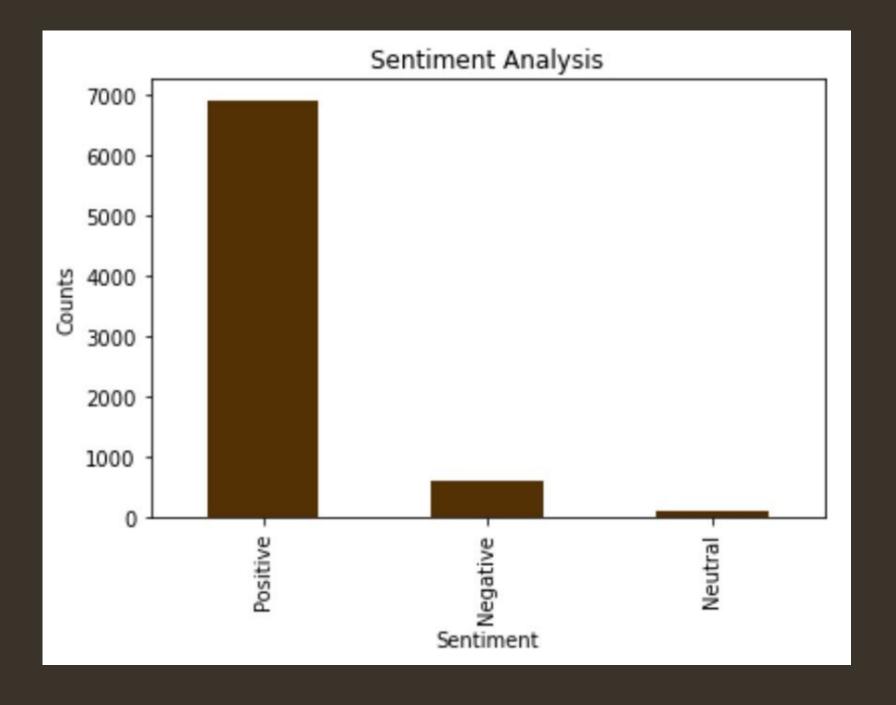
Place, Service and Food

TOPIC MODELING

Topic Name	Words
Topic 0: Place	Coffee, vibe, place, service, seating, food
Topic 1: Service	Coffee, shop, moon, best, iced, cup service
Topic 2: Food	Moon, cream, milk, tea, sweet, ice, food

SENTIMENT ANALYSIS

- Subjectivity and Polarity were found
- Based on Polarity analysis were conducted



RECOMMENDATION SYSTEMS

• COSINE SIMILARITY

Word	Recommendation
Good Atmosphere	Russell's Bakery, Cafe Crème, Jo's Coffee
Good Coffee	Flightpath Coffeehouse, Café Medici
Good Service	Mary's Café, Dolce Neve

THANK YOU!