

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.

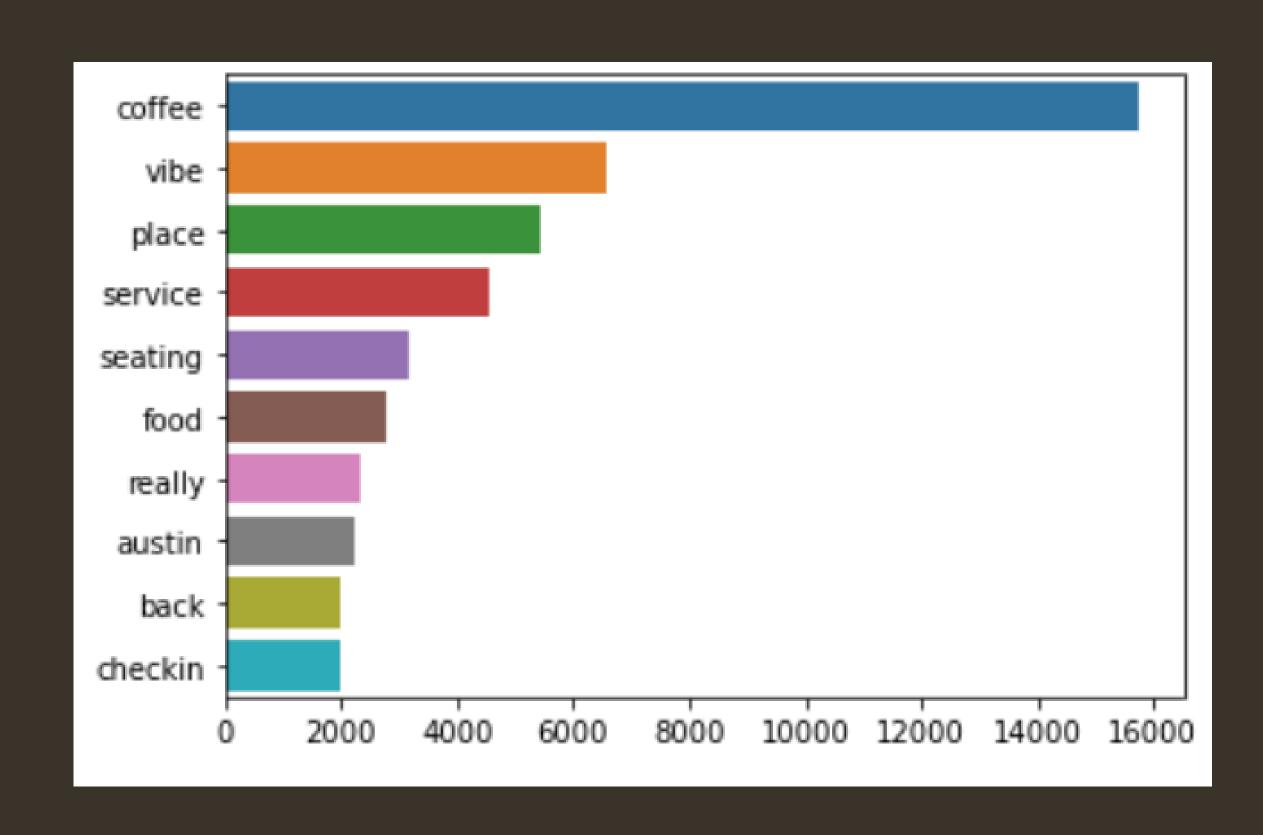
DATA DESCRIPTION

- 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**

EDA



EDA



TOPIC MODELING



The use of TF-IDF with LSA



3 Topics were selected



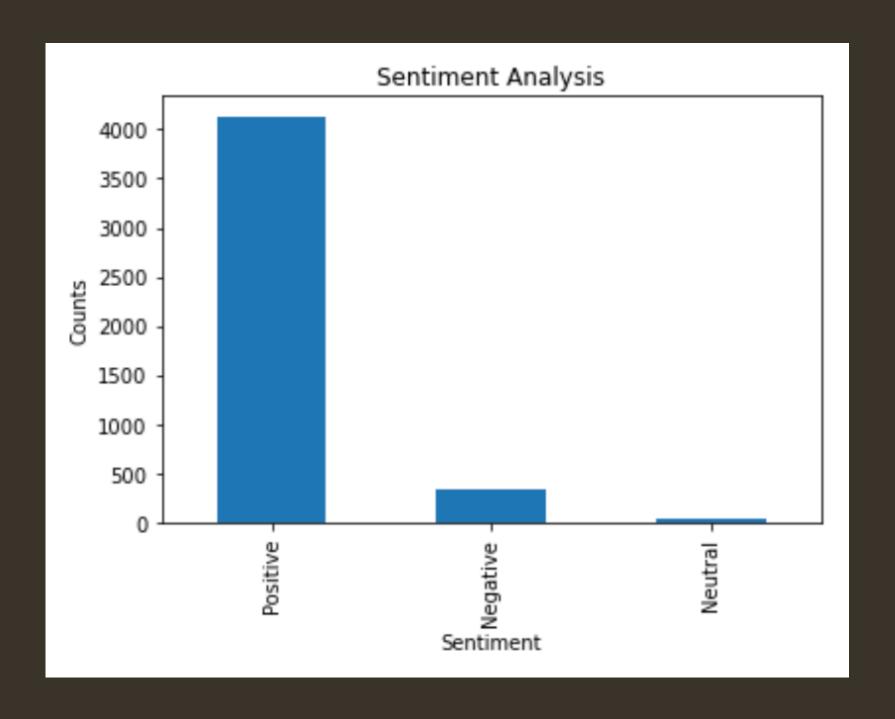
Place, Service and Food

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 |

SENTIENT ANALYSIS

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



RECOMMENDATION SYSTEMS

• COSINE SIMILARITY

| Café Name | Recommendation |
|------------------------|-------------------------------------|
| Patika | Houndstooth Coffee, Cafe Crème |
| Houndstooth | Flightpath Coffeehouse, Café Medici |
| Venezia Italian Gelato | Mary's Café, Dolce Neve |

THANK YOU!