

SAVORSPACE TRAVEL AGENCY

TASK FORCE

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ABOUT US

Savor Space is a growing tourism and travel agency offering a wide range of services; from booking accommodations to providing tour guides and creating personalized travel experiences.

Mission:

Our mission is to ensure that tourists have an enriching and seamless journey hence fully enjoying their destination.

BUSINESS UNDERSTANDING

Problem: Tourists struggle to find restaurants that meet their tastes when visiting unfamiliar locations.

Solution: Savor Space's personalized recommendation system solves this by providing tailored suggestions.

Impact: Improved tourist satisfaction, increased customer retention, and enhanced Savor Space's competitive edge.





OBJECTIVES

1. To develop a robust restaurant recommendation system.
2. To improve tourist satisfaction- by matching restaurants to their individual tastes to restaurants.
3. To leverage data science techniques including NLP as well as recommendation algorithms
4. To evaluate and improve the recommendation system



DATA UNDERSTANDING

Data Source:

• We used real-world data from Yelp, including restaurant and review information.

Datasets:

- **Business Dataset:** Information about restaurants (location, categories, etc.)
- **Review Dataset:** User preferences and over 2 million reviews

Delicious Grilled Chicken



Sweet Prawn Sauce



Mix Platter Sushi





DATA PREPARATION

The data was preprocessed to ensure that it was in a suitable format for analysis. This involved the following steps:

- **Data Cleaning:** Removing any duplicate or irrelevant data.
- **Data Transformation:** Converting the data into a suitable format for analysis.
- **Data Normalization:** Scaling the data to a common range to prevent feature dominance.
- **Data Modeling**



OBSERVATIONS AND FINDINGS

We analyzed the data to find key trends and patterns, such as restaurant categories, most popular restaurants and reviews through a word cloud.

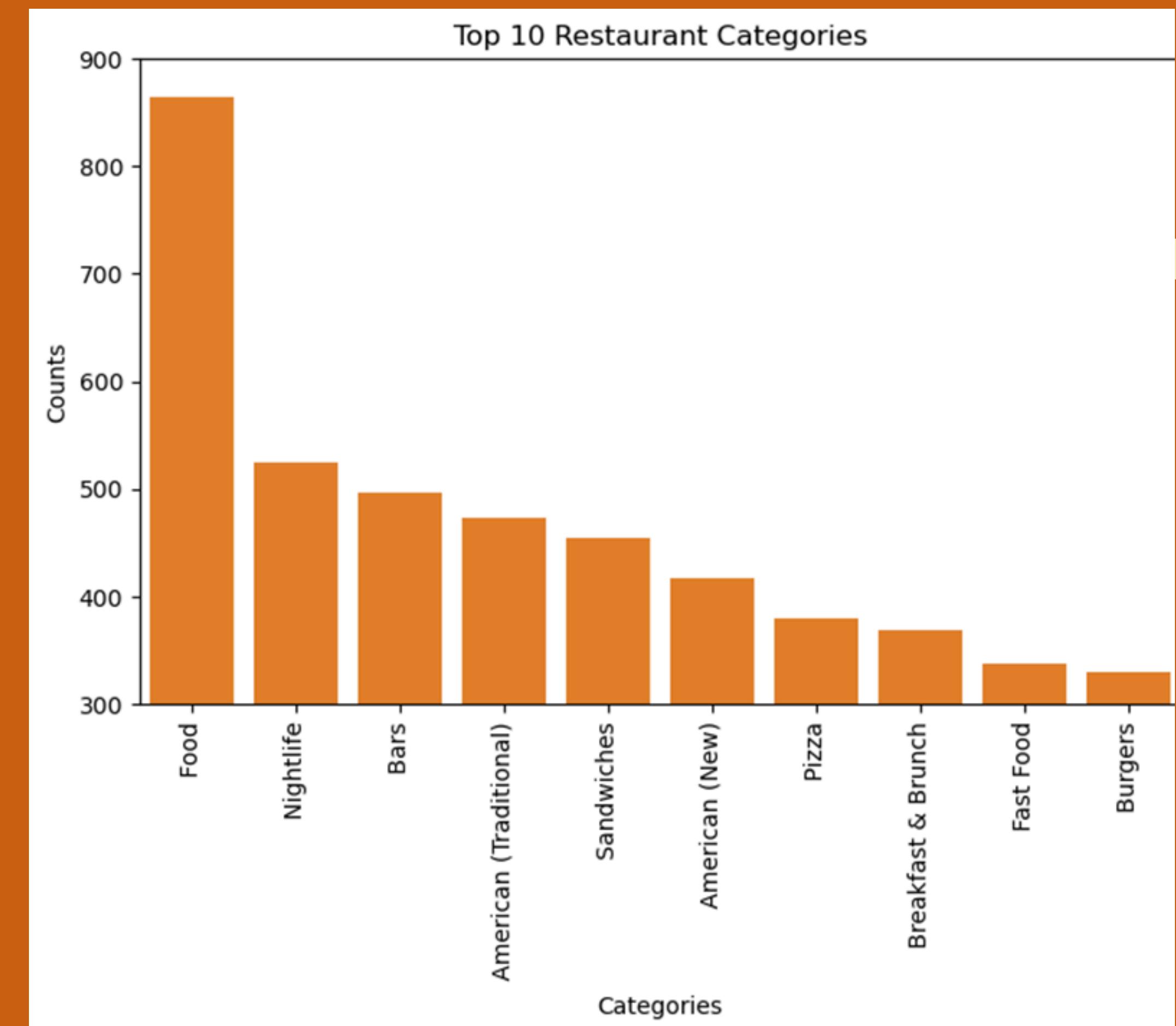




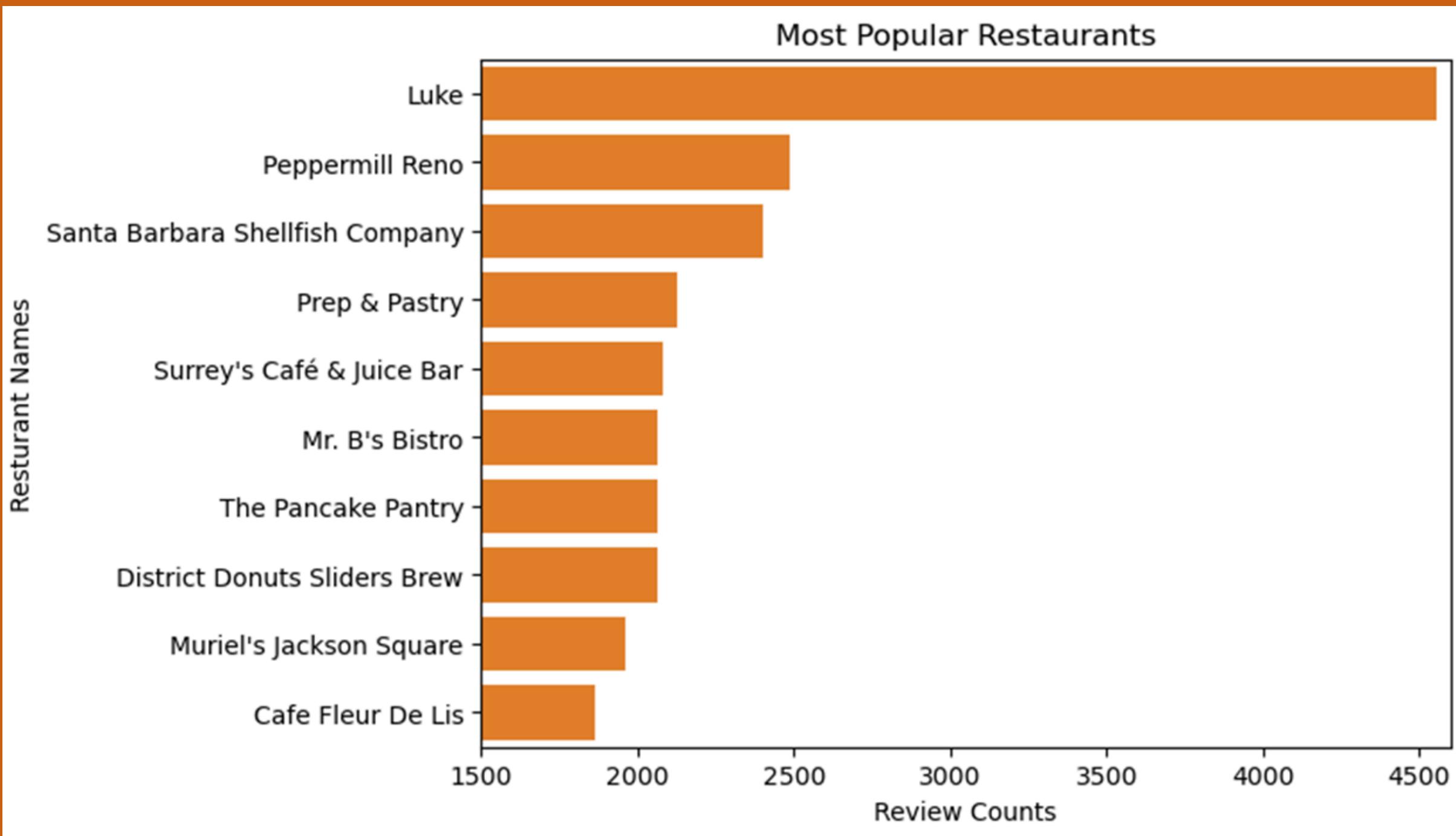
TOP 10 RESTAURANT CATEGORIES



Top 10 Restaurant Categories



TOP 10 RESTAURANTS BY NAME



REVIEW WORD CLOUD



PRESENTATION



MODELING APPROACH

Recommendation Methods

Content-Based Filtering:

- Analyzes user preferences to recommend restaurants with similar features (e.g., cuisine type, ambiance).
- Uses characteristics of previously liked restaurants to suggest new options.

Neural Network:

- Implements deep learning techniques to understand complex user behaviors.
- Continuously improves recommendations based on user feedback and interactions.

Overall Performance:

- Achieved an accuracy score of 1.25 with our best model, indicating high relevance in the suggestions provided to users.

CONCLUSION



- Successfully developed a user-friendly restaurant recommendation system.
- Offers personalized dining suggestions based on user preferences and restaurant ratings.
- Achieved key objectives by creating an easy-to-use website and refining algorithms through in-depth analysis.
- Enhances dining experiences by providing tailored recommendations.



RECOMMENDATIONS AND NEXT STEPS

RECOMMENDATIONS



1. User Feedback Integration
2. Improved User Profiles
3. Geographical Expansion
4. Improving the recommendation algorithms by exploring advanced machine learning techniques



NEXT STEPS



1. Encourage Community Engagement
2. Real-Time Updates
3. Food Delivery Integration
4. Advanced Machine Learning





THANK YOU FOR
YOUR TIME



SAVORSPACE

DISCOVER DINE DELIGHT

