

Applied Data Science Capstone

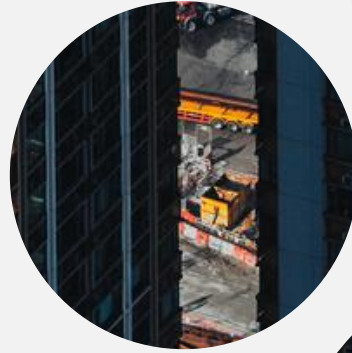
Battle of the Neighborhoods

July 27, 2021

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Agenda

- Introduction
- Data Acquisition
- Data Analysis
- Future Possibilities
- Conclusion



Introduction

With the massive growth of the city of Riyadh, Saudi Arabia, finding a decent restaurant within the 1972 km² area of the city is a nightmare.

This project aims to provide a high-level understanding of:

- Top cuisines in the main districts.
- City clusters based on cuisine.



Data Acquisition



City Districts - WIKIPEDIA

- WebScraping via BeautifulSoup in python.
- Shortlisted 16 main districts from 130+ districts of Riyadh.
- Limited Data availability.

Coordinates – GOOGLE MAPS

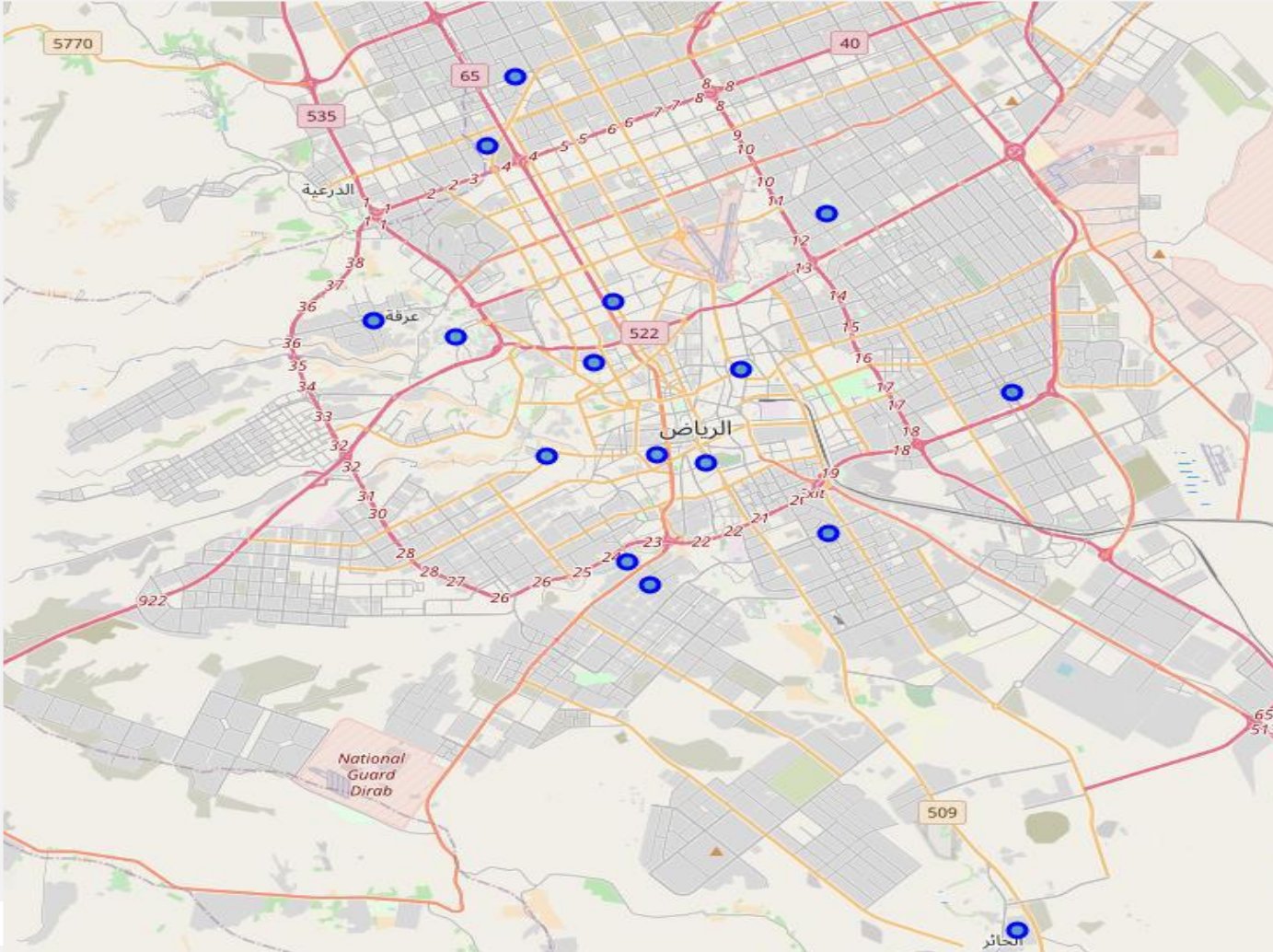
- Centroid coordinates of each district.
- Hosted via Google Drive and using python libraries to load csv into data-frame.

Restaurants - FOURSQUARE

- Integration developed for Foursquare API.

Data Analysis

Visualizing the main districts in the city of Riyadh



■ Inference

- The analysis is scattered across the city proportionally which allows to generalize the results for the city.

■ Data Source

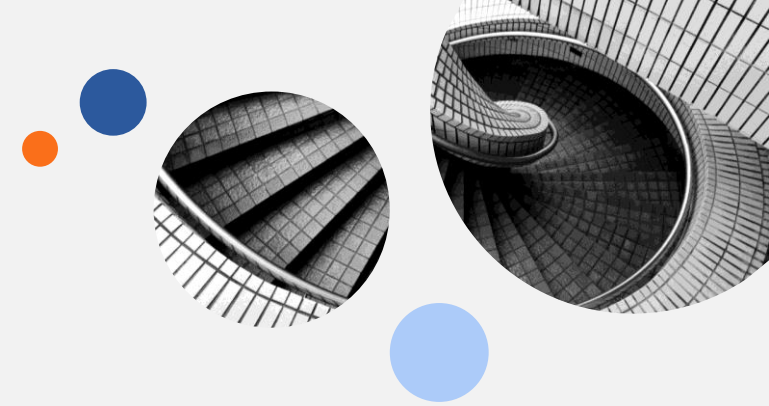
- Wikipedia
- Google Maps

■ Language

- Python

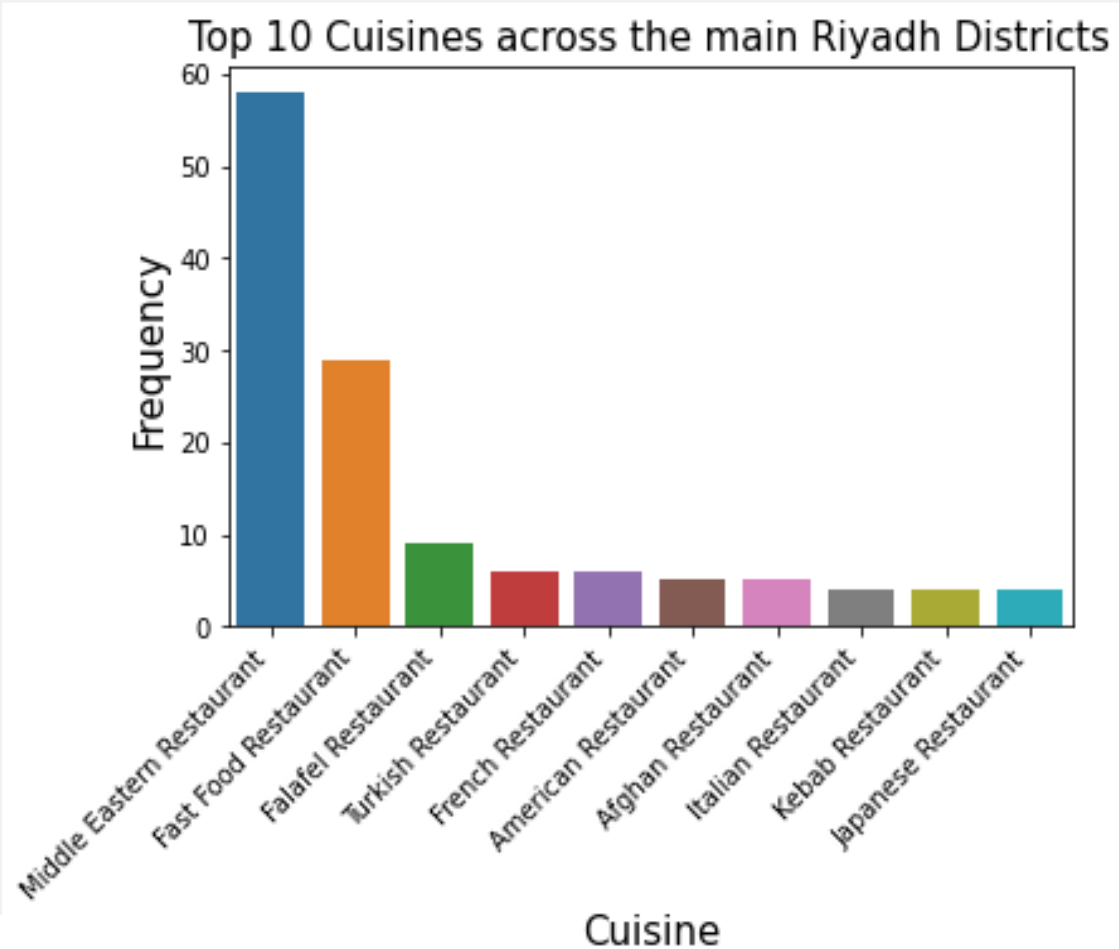
■ Library

- Folium



Data Analysis

Visualizing the TOP 10 cuisines in Riyadh



■ Inference

- The analysis clearly shows Middle Eastern Cuisine with the most restaurant.

■ Data Source

- Foursquare

■ Language

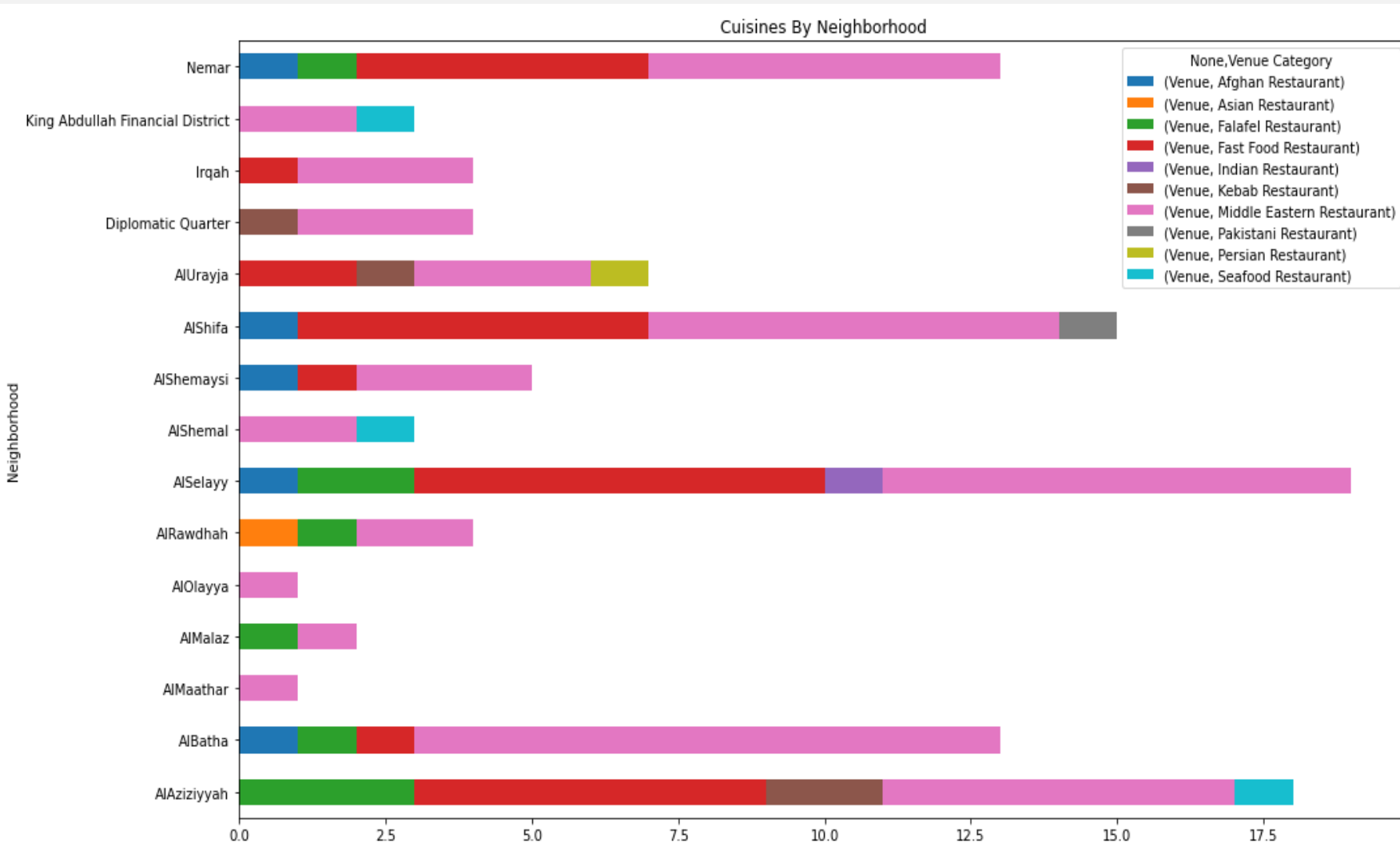
- Python

■ Library

- matplotlib

Data Analysis

Visualizing the cuisine distribution by district in Riyadh



Inference

- Middle Eastern Cuisine is still the cuisine for most restaurants across all districts.

Data Source

- Wikipedia
- Google Maps
- Foursquare

Language

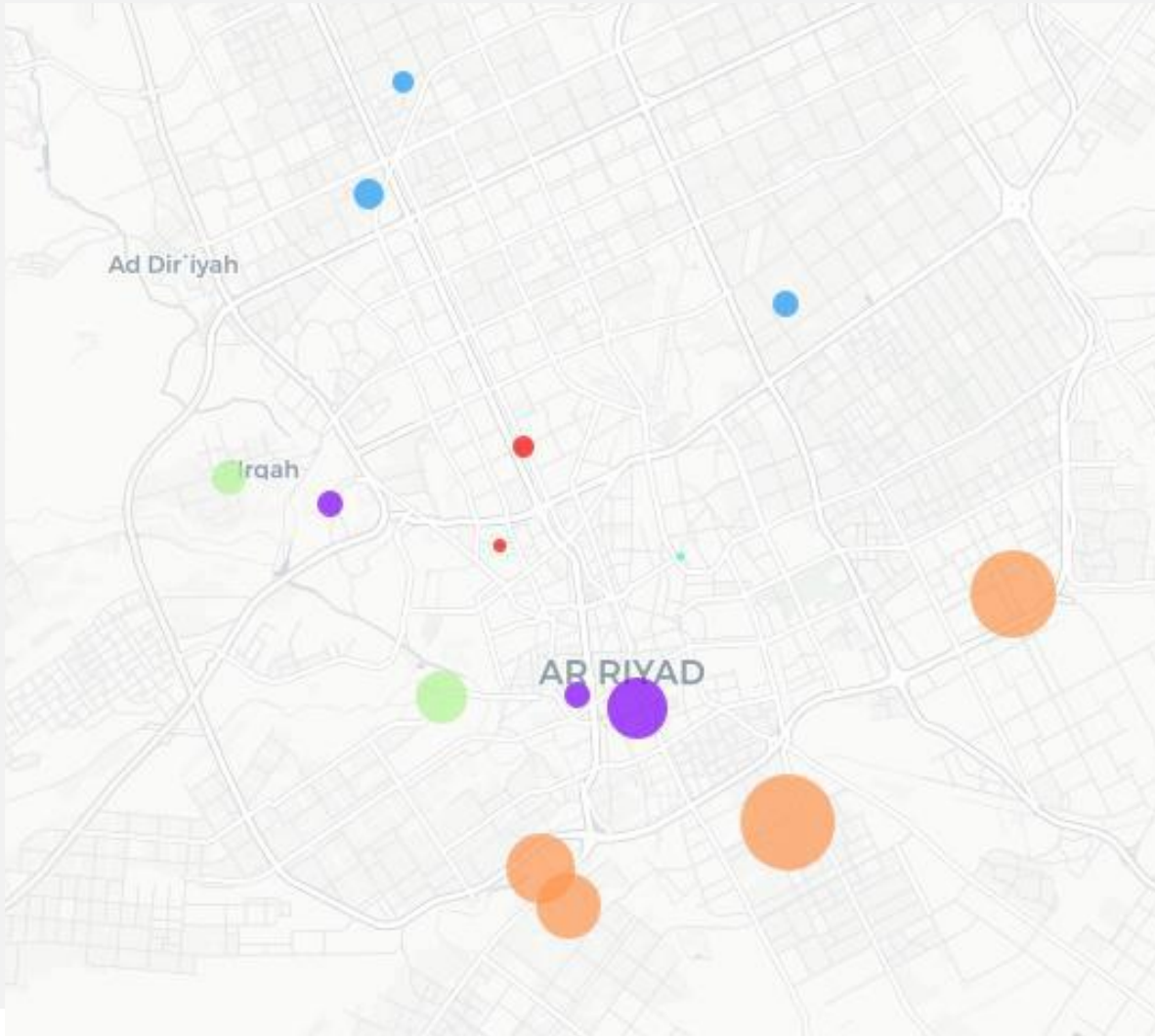
- Python

Library

- matplotlib

Data Analysis

Visualizing the cuisine distribution by district in Riyadh



■ Inference

- Middle Eastern and Fast Food
- Middle Eastern and Asian Minority
- Middle Eastern and European
- Middle Eastern and Asian
- European
- Diverse Middle Eastern

■ Data Source

- Wikipedia
- Google Maps
- Foursquare

■ Language

- Python

■ Library

- Folium
- Scikit-learn

Future Possibilities

This analysis is just the tip of the iceberg. This project can be converted into a recommendation engine with better data sources such as:

1. Population distribution by district
2. Spending power by district
3. Coordinates by district
4. Top nationality by district

The recommendation engine can provide insights to potential investors on the best districts to open a restaurant in the city based on:

- Spending Power (Will be able to determine the standard required)
- Top Nationality (Cuisine advisor)



Conclusion

This project was able to give insights on:

1. Market saturation for Middle Eastern cuisines and Fast-Food joints.
2. Massive scope for diverse cuisines.





THANK YOU

Team



Ana

Sales Manager



Roman

Sales Representative



Federico

Sales Representative



Jim

Support Representative



Larissa

Support Representative

Timeline

Q1

Jul

Aug

Sep

Product launch

Lorem ipsum dolor sit
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Q2

Oct

Nov

Dec

Product launch

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Q3

Jan

Feb

Mar

Product launch

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Q4

Apr

May

Jun

Product launch

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Summary



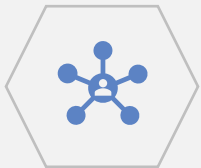
We're delivering for our customers

Last year we supported thousands of customers and sold 60,000 units



Our customers keep coming back

We increased customer retention by 4%



Our team is growing

We welcomed 3 new team members last quarter



Our business is good

Profits are up in the last quarter by 3%



We're getting our work done

We finished the consolidation project



We're leaders

We are top leaders in the industry across the board