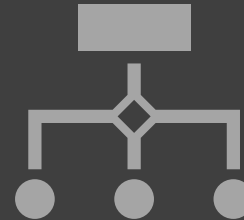# Developing Commercial Building in Canberra, Australia

Applied Data Science Capstone by IBM/Coursera

Introduction

Capital city of Australia – Canberra,

Analyzing to build offices for start-ups in right place

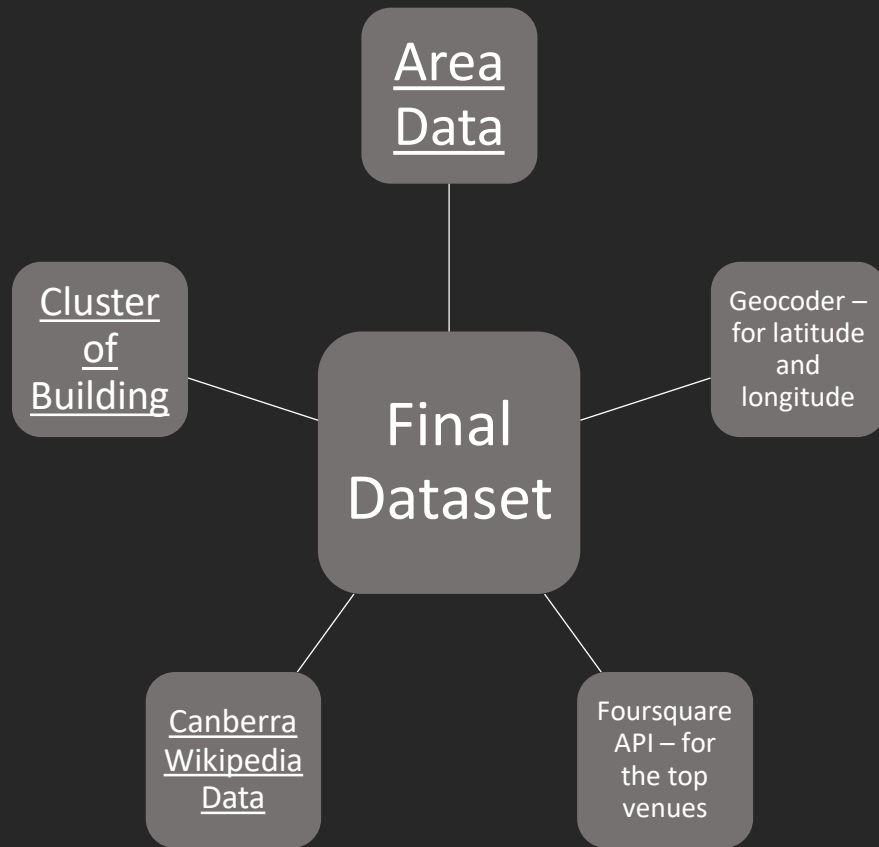**Explore, segment, and cluster to find :**

The similarities of buildings location in Canberra

The right palce to build and invest for buildings.

Canberra

- Mostly Centrally Populated
- Capital City of Australia
- Spread over 814.2 km^2
- Nearest Coast 150 km

Data

Area Data

Cluster of Building

Geocoder – for latitude and longitude

Final Dataset

Canberra Wikipedia Data

Foursquare API – for the top venues

Tools Used:

- Folium
- Panda
- Numpy
- Foursquare API
- Scikit Learn

Methodology

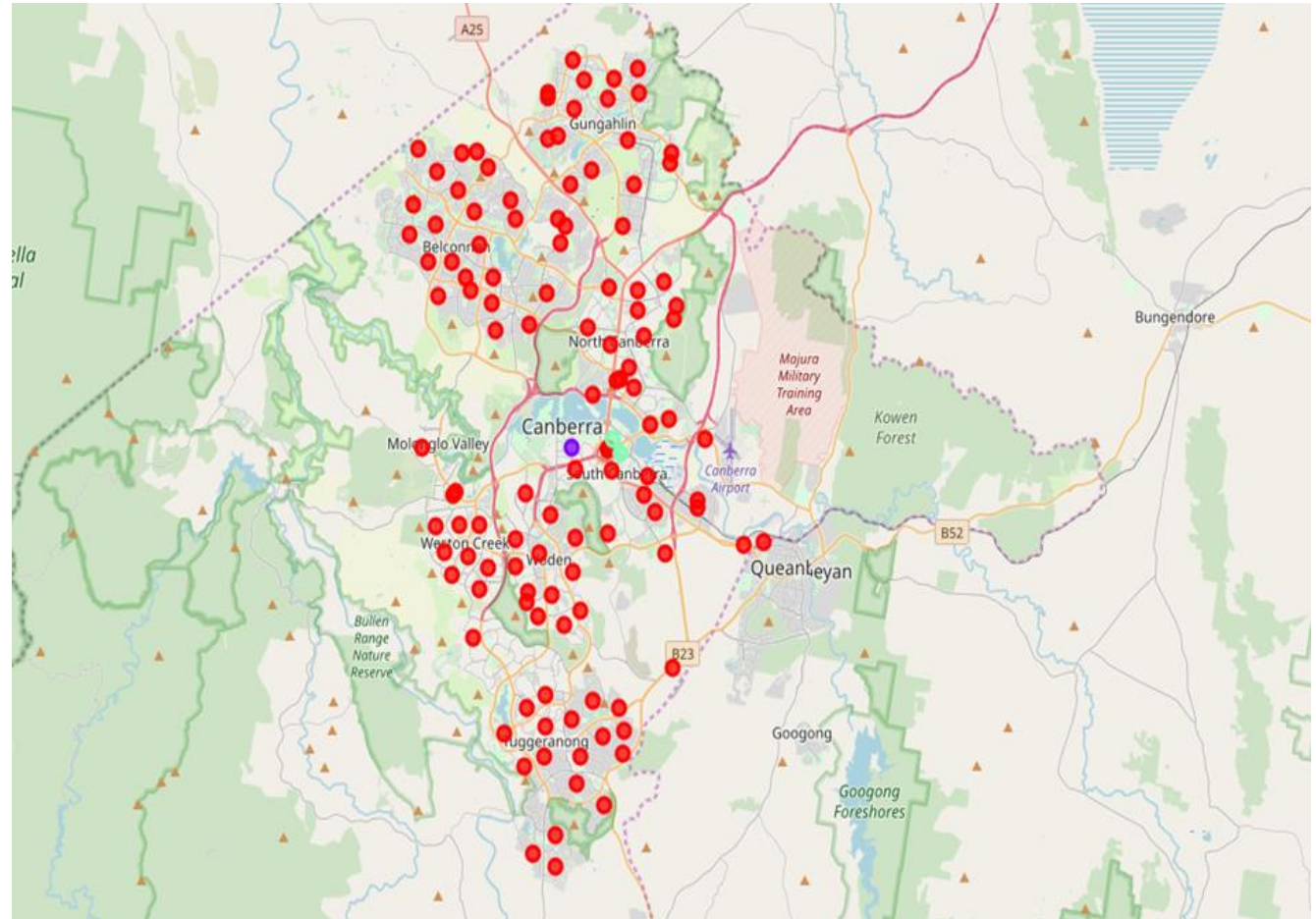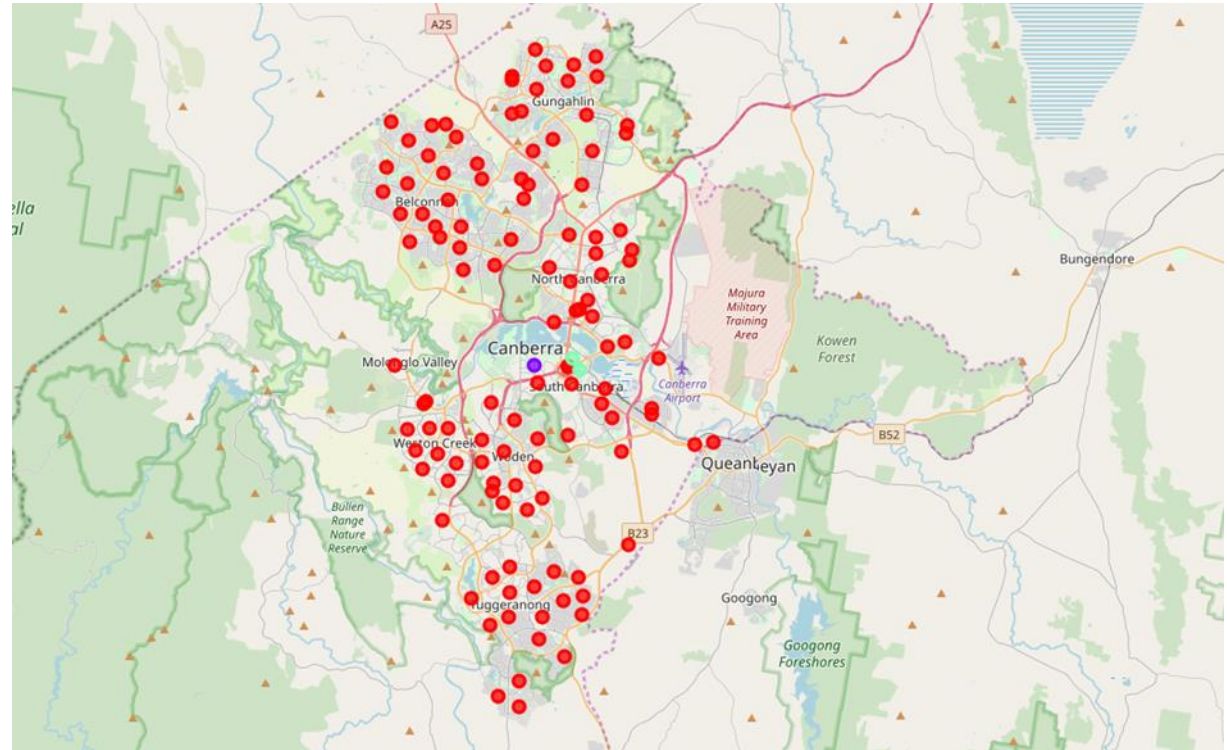| Business Problem	Data Collection	Data Cleaning	Exploratory Data Analysis	Conclusion
Developing a building In Canberra, Autralia at Better place to invest	Wikipedia Data Geocoder Foursquare API	Kept only the required metrics Transformed the data into right data type in Python	Using Folium explore the data Plotting map of cluster Visualize the data on the map Clustering and Segmenting	Discussion Insights Report

Neighborhood in Canberra

Total 124 Neighborhood in Canberra

- 121 in Cluster 0

- 1 in Cluster 1

- 2 in Cluster 2

Clustering of Buildings

- Both clusters are really good for commercial as well as office space.

- Top most common venues in city

- Transport Hub(Airport)

- Resort

Insights

Both cluster 0 and 1 are really good for commercial purposes.

Good Food – The most common venue in both is Cluster 0, in general there are a lot of buildings

Concentration is high in Cluster 0

Canberra – Capital of Australia

Conclusion

✔ Successfully used the available resources for the comparison.

☁ Cluster 2 is good for investment.

📍 Since there is limitation on Foursquare API, to get more better result.

Future Scope

Need to look at various other points such as weather, employment rate, income, etc. – to come to a definite point.

If the restriction on the Foursquare API radius restriction gets removed, then this analysis can be performed again to get more clearer picture.

Thank You!