IBM Capstone

What is the best place to open a restaurant in Canberra, Australia?

# 1 Introduction

## 1.1 Business problem

The aim of this project is to consider the city of Canberra in Australia and identify suitable locations to establish a restaurant. The suitability of the location will be sourced clustering each neighbourhood and extrapolating the popular places for a restaurant to be established.

## 1.2 Background

Canberra is Australia’s capital city. Despite being the official capital, its relatively small compared to the major cities talked about like Melbourne. Compared to Melbourne, the city of Canberra has a fraction of its population, population density, and geographical area. However, the city is home to several important features and monuments such as the Parliament House, Major Universities, Royal Australian Mint, Australian Institute of Sport, National Gallery, etc. The city has experienced strong and sustained growth, adding approximately 30,000 people since 2012 (act.gov, accessed 2020).

## 1.3 Interest

Canberra is a planned city which should scale well into the foreseeable future as Australia’s population grows. With its future potential, and important significant, Canberra is a strong location to consider when establishing and operating a new restaurant.

# 2 Data

## 2.1 List of Data Sources

1. Mathew Proctor Australian Postcodes: <https://www.matthewproctor.com/australian_postcodes>

2. Foursquare Places API: <https://developer.foursquare.com/docs/places-api>

## 2.2 Data Acquisition

For this project, data is acquired to process geographical location data and leverage the Foursquare API to map all listed venues in the area with their associated category. A feature set containing the name of suburbs of a given postcode and coordinates for each postcode is to be used to leverage Foursquare. A mathewproctor.com has access to csv files which contain postal information by state. The datasets contain the postcode, state, locality, coordinates, and other postal information. The important features from this dataset are postcodes, state, locality, and coordinates. Foursquare will be primarily utilising the coordinate information from the postcode dataset, and the extrapolated venues will be used to cluster each locality.

# To be in final references

Note: final will include all references in Harvard Style as necessary

<https://www.planning.act.gov.au/act-planning-strategy/setting-the-scene/a-growing-and-diversifying-population>