Finding the Best Location to Live

for new migrant families

COURSERGIA APPLIED DATA SCIENCE

Capstone Project Kamin Arifin 6 June 2019

Agenda

- Introduction
- Data Sources
- Data Analysis

Introduction

As an immigrant myself, I still remember very clear the struggle that I was experiencing when I migrated to Australia. My family and I chose Melbourne as a new place we call home. Of course, the first mission which I needed to accomplish was to find a roof for my family and I to live under.

As a new comer, I was not too familiar with the environment. I found it's quite challenging to find a house that met my requirements within a short period of time.

In this project, I will use data science to provide information regarding suitable housing areas for new immigrants which may be experiencing the same issues as I did.

Data Source

The main sources of data that I will use for this project will be from <u>Australian Bureau Statistics</u> in Excel Format:

- Population and People, ASGS, 2011 to 2018
- Education and Employment, ASGS, 2011 to 2018
- List of Venues (Using Foursquare)

For Geocoders I will use GeoPy. It has simple interface and easy to be used. It's able to find the coordinates of addresses, cities, or even to measure distance of one location to the other.

Data Analysis

ABS provides a very rich statistic data of Australia population. From those data we will be able to review their ages, educations, religions, country of origins of each suburbs (areas)

By using Foursquare, we will able to see the most popular venues in those suburbs.

By combining all those data, we will have a complete picture of suburb.

Data Analysis (Continue)

Our main goal is to see the which suburbs that will suit most to the new immigrant that's trying to find a new place to live.

By clustering the suburbs based on the interest of that family I hope they can see very clear the profile of each suburbs and make the correct decision.

For Geocoders I will use GeoPy. It has a simple interface and easy to be used. It will help me to find the coordinates of addresses, cities, also to measure distance of one location to the other.