The Battle of the Neighbourhoods Capstone Project IBM Data Science Certificate

Introduction

Melbourne is one of the most popular capitals in Australia for people to live. Known for its trendy cafe culture and open spaces it frequently featured as one of the most livable cities globally. Due to its popularity Melbourne is growing quickly with population growth of up to 6% each year, fueled by interstate migration due to the comparative affordability of Melbourne compared to Sydney and by new immigrants to Australia with >30% of new immigrants to Australia from overseas settling in Melbourne.

Associated with this growth Melbourne suburbs are rapidly re-developing creating new opportunities for cafes and bars to open to provide nightlife for the residents of these redeveloped areas. This report seeks to identify the most appropriate location to open a new bar in Melbourne to capitalise on this growth.

Data Sources

Based on definition of our problem, factors that will influence our decision are:

- A list of suburbs within Melbourne (Wikipedia)
- Anticipated population growth for each Melbourne suburb between 2020 and 2030 (ABS)
- Existing venue data to understand where venues already exist and how popular the venues in each area (Geocoder Python)
- Latitude and longitude coordinates for each location and venue to support plotting exercises and to support the retrieval of venue data (Foresquare)

It is anticipated that the suburb and population growth data will be able to be scraped from the web and matched together to show the high growth areas of Melbourne. This will then be overlayed with existing venue data to identify gaps or hot spots as to where the opening of a new venue is more likely to be successful