Capstone Project – Report

Finding Safe Neighbourhoods for Living for International Students in London

1 Introduction

London is one of the most popular study destinations and has been ranked the 1st for Best Student Cities. It is also a popular destination for international students looking for higher education experiences. According to the Evening Standard, there are more than 120,000 international students in London in the year of 2018/19. Except for the expensive rent in London, many students are also concerned about the safety of the areas for living.

This project is going to review the boroughs in London based on total crimes numbers and types of each area, top venues in the borough will also be explored. In addition, the neighbourhoods will be clustered using k-means clustering. The results can be a reference for International students planning to find a safe and cosy home in London.

2 Data Source

The data used in this study requires both the number of crimes committed during the past few years in each borough and the most popular venues within these areas. The safest borough and the top 10 venues in each area is analysed. In the section of finding the popular venues, foursquare data will be needed as location data.

The dataset used for crime is from Kaggle.com, containing 13 million of crimes classifed by the borough in which they occured, together with their category and time. The link to the data source is https://www.kaggle.com/jboysen/london-crime.

After the treatment of the crime data for all the boroughs in London, the dataset is complemented with additional information from the table on Wikipedia webpage: List of London boroughs (https://en.wikipedia.org/wiki/List_of_London_boroughs).

Once the safest borough is selected (Kingston upon Thames), the neighbourhoods and districts of this borough are found on the Wikipedia webpage: List of districts in the Royal Borough of

Kingston upon Thames (https://en.wikipedia.org/wiki/List_of_districts_in_the_Royal_Borough_of_Kingston_upon_ Thames).

The top venues are explored in each neighbourhood using the data from Foursquare using the developer API (https://foursquare.com/developers/apps).