****Data Science Capstone****

****Introduction/Business Problem****

**The recent Covid-19 pandemic not has implications for public health but also has implications for economic growth, in particular for the hospitality industry. In particular, small food/takeaway outlets have been affected by changes in commuter traffic, for example.**

**The aim of this project will be to investigate the impact of the economic, demographic, and location factors on where a new food outlet should be located in the city of London and associated boroughs. For simplicity, I will consider the possible optimal location of an Indian restaurant. Demographic, economic, and demographic data. In particular, this report will focus on the following points.**

1. **Median household income;**
2. **Average house prices;**
3. **Proximity of factories and other workplaces;**
4. **Foot traffic data (foursquare data);**
5. **Concentration of similar food-lets and popularity (foursquare data);**
6. **Crime levels by borough - often, there is a correlation between this and economic prosperity and education.**
7. **Popularity of similar types of restaurants in London boroughs.**

****Data sources****

1. **Opensource datasets, for example country of birth datasets, by region - demographics;**
2. **Average household income by region/borough in London - spending power;**
3. **Foursquare data to visualize types of work places;**
4. **Foursquare foot traffic data;**
5. **Use of foursquare data to visualize pockets of similar food outlets by region/borough in London.**

****How the data will be used****

1. **Use of folium choreopleth maps to visualise household income per capita across London boroughs;**
2. **Folium can be used to generate maps to visualize where the highest concentrations of similar restaurants (based on lonitude/latitude coordinates);**
3. **Use of foursquare data to analyse user data, for example ratings;**
4. **Heatmap of crime rates;**