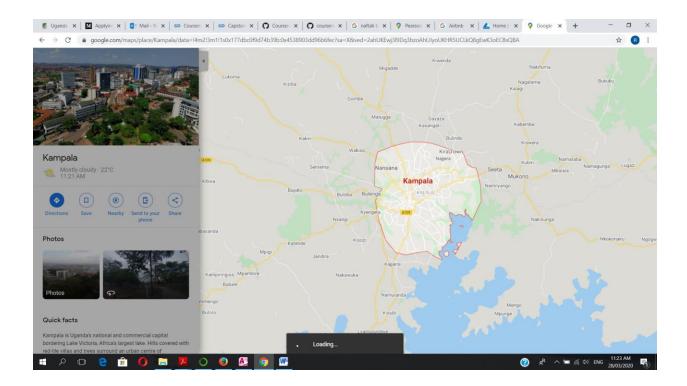
### BEST PLACE TO BUY CONDOMENIUM FLAT FOR AIRBNB BUSINESS IN KAMPALA UGANDA

## Background

### **Kampala City**

Kampala is Uganda's national and commercial capital bordering Lake Victoria, Africa's largest lake. Hills covered with red-tile villas and trees surround an urban centre of contemporary skyscrapers. In this downtown area, the Uganda Museum explores the country's tribal heritage through an extensive collection of artefacts. On nearby Mengo Hill is Lubiri Palace, the former seat of the Buganda Kingdom.





In 2012, Uganda passed the Condominium Act 2012. Under the Condominium Property Act of 2012, a real estate development company can build apartments and sell them as is and give the buyer a title deed for his property the same way you would sale a stand-alone house on a plot of land.

Therefore, it is a form of housing tenure system where part of a piece of real estate usually of an apartment house is individually owned.

In this setting, use of and access to shared facilities, such as hallways, heating system, elevators, and exterior areas are executed under legal rights associated with the individual ownership and controlled by the association of owners that jointly represent ownership of the whole condominium.

Airbnb: Airbnb, Inc. is an online marketplace for arranging or offering lodging, primarily homestays,

or tourism experiences. The company does not own any of the real estate listings, nor does it host events; it

acts as a broker, receiving commissions from each booking. It was founded in 2008 in San Francisco California United States of America.

How does Airbnb work? Airbnb is an online marketplace which lets people rent out their properties or spare rooms to guests. Airbnb takes 3% commission of every booking from hosts and between 6% and 12% from guests.

#### **Problem**

An investment club wishes to buy several condominium flats and list them on Airbnb and the location of the flats should meet the following criteria:

- (1) Should be within 7km radius off the Kampala Central Business District.
- (2) Should be close to the best Restaurants located within the defined area in (1) above since majority people who use Airbnb are tourists and conference participants.

#### Interest

Apart from the Investment club, Real Estate companies and investors will be obviously interested.

## Data acquisition and cleaning:

#### **Data sources**

To obtain data on Restaurants, I signed up for Google Places API. I parsed the Json data and saved it an excel file and added it to my github repository. (link to data). Google places Api limits the search to only 60 restaurants and i had run it several times to obtain more data and it is what is presented in the dataset. Data was also obtained on Kamapala venues using Four-square API.

#### Data Cleaning.

There was no need for data cleaning since that data provided by Google was clean and there was no missing data.

### **Data overview**

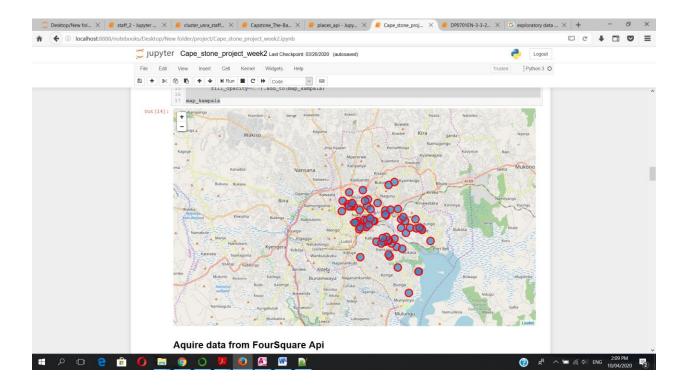
Using this data let us properly answer all question and see a full picture of Kampala Restaurants. Data will enable us to properly group restaurant based on ratings and locations.

Data on Kampala venues will be obtained from Four-square Api, parsed into a dataframe and visualize using Folium. Since the two Apis return different sets of data, clustering will be done on each dataset and best locations (those with best restaurants) recommended.

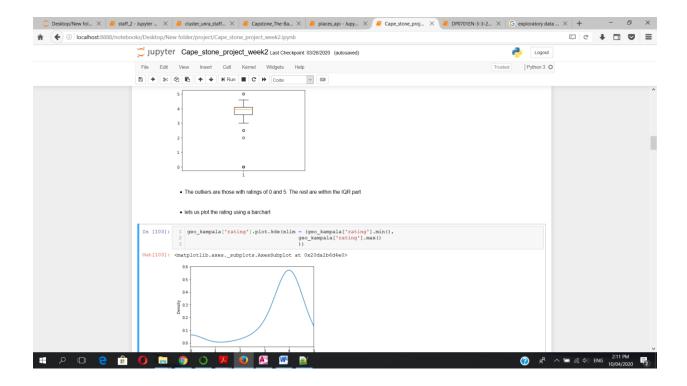
# **Exploratory Data Analysis**

This involved data visualization using boxplot and maps.

Visualization using a map.



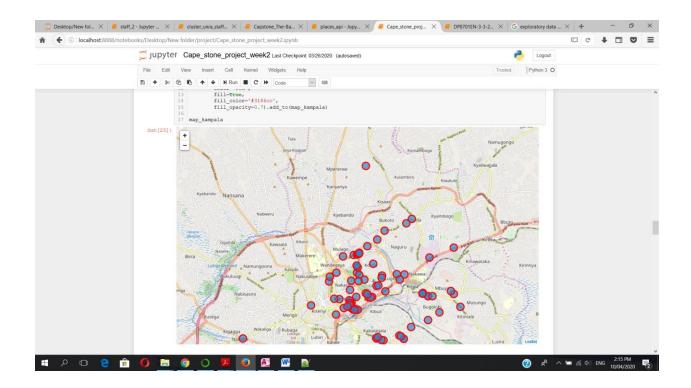
Visualization using a boxplot and KDE density plot.



The plots shows no outliers and that data ratings are majorly between 3 and 4.

## Data visualisation for Four-Square Api data.

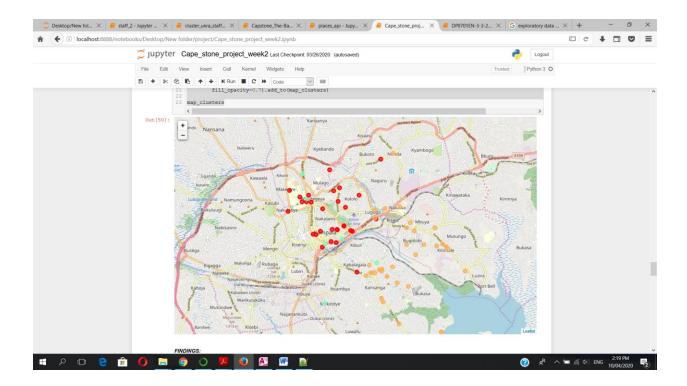
Data was obtained from the Api and visualised as below.



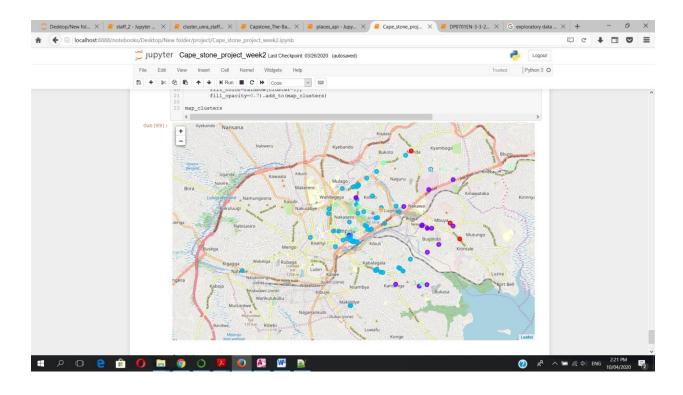
### Clustering using K-mean algorithm.

Since the purpose of the study was to find best locations to buy property, I clustered the two data set using K-means and presented the clusters on the map.

Clustering of Google Places API data using K-mean .



Visualisation of clusters of venues from FourSquare Api data .



#### **Discussions and Recommendations.**

- (1) Using Google places API data, the best rated restaurants were found in Kololo and Nakasero.
- (2) Using Four Square Api venues data, most clusters of restaurants were found in Kololo, Nakasero, Wandegeya and Bugolobi.

#### Recommendation:

The best place to acquire property from is Kololo, Nakasero, Wandegeya and Bugolobi subject to availability of funds.