IBM APPLIED DATA SCIENCE CAPSTONE PROJECT

Finding a good location for a new restaurant in Lagos Nigeria

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Business problem

*   The main goal of a restaurant is to maximize profit and to do this, many factors come to play, especially the location of such restaurant.

*   This project aims to predict the best place to open a new restaurant in Lagos Nigeria.

*   The targeted audience for this presentation are property developers and investors

Data sources

*   List of neighborhoods in Lagos Nigeria from https://en.m.wikipedia.org/wiki/Category:Neighborhoods_of_Lagos

*   Python Geocoder was used to get the geographical coordinates (latitude and longitude) of the neighborhoods in Lagos Nigeria.

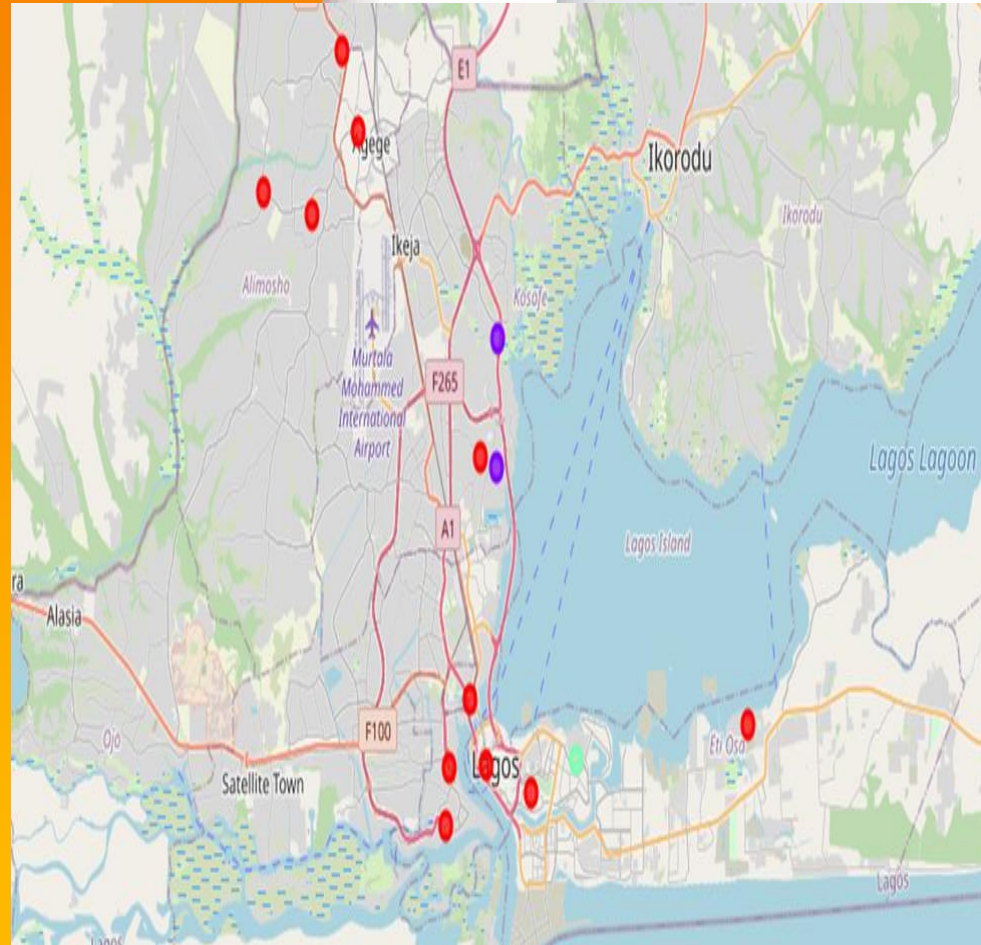*   Foursquare API was used to get the venue distributions of the neighborhoods

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Methodology

*   Web scrapping from Wikipedia.
*   Get longitude and latitude using geocoder
*   Foursquare API to get venue data
*   Group data by neighborhood
*   Filter venue category by restaurants
*   K-means clustering to group the neighborhood into 3 categories
*   Visualization with folium

Results

From the analysis it was discovered that;
*	Cluster 0: Neighborhoods with very few restaurants
*	Cluster 1: Neighborhoods with moderate concentrations of restaurants
*	Cluster 3: Neighborhoods with high concentrations of restaurants

Thanks!