

A decorative graphic on the left side of the slide, consisting of a network of white lines and small circles on a blue gradient background, resembling a circuit board or a stylized tree structure.

VENUES IN SANDTON

ANALYSING VENUES IN SANDTON

BUSINESS PROBLEM

- Sandton is a suburb located in Johannesburg, South Africa.
- The suburb has a population of 222 415.
- Sandton is filled with diverse venues.
- A lot of Entrepreneurs, Entertainers and Tourists visit Sandton.
- In this project, we will provide Entrepreneurs, Entertainers and Tourists information about the types of venues in Sandton.

DATA

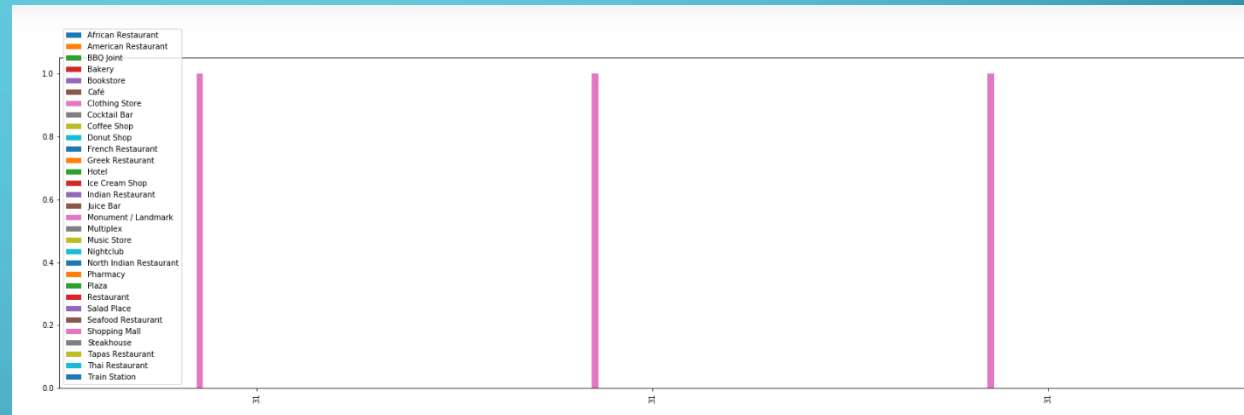
- The information about the different suburbs in Johannesburg was obtained from The City of Johannesburg Metropolitan Municipality Wikipedia page.
- The coordinates for each Johannesburg suburb were obtained from Google Maps.
- The 50 different venues in Sandton were obtained from the Foursquare API.

IMPLEMENTATION

- To achieve our objective to getting an idea of the different types of venues in Sandton.
- We analysed the venue categories in Sandton.
- Since the data contained common venue categories,
- K-Means algorithm was used to group the venue categories into 5 clusters.

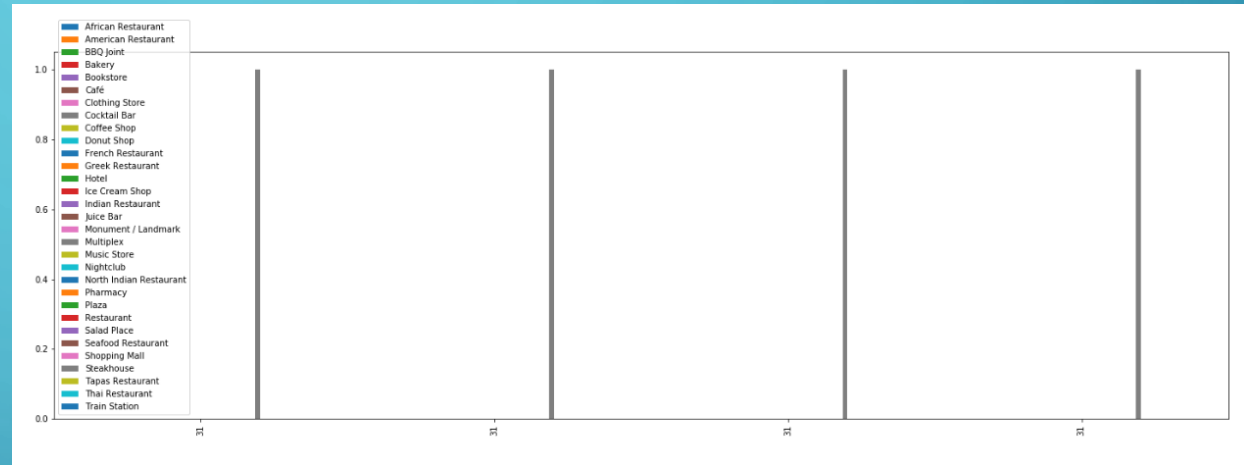
CLUSTER 5

- Based on the graph, Cluster 5 contains only Clothing Stores that are in Sandton.
- Of the 50 Venues that are within a radius of 500 meters in Sandton, 3 of them are Clothing Stores.



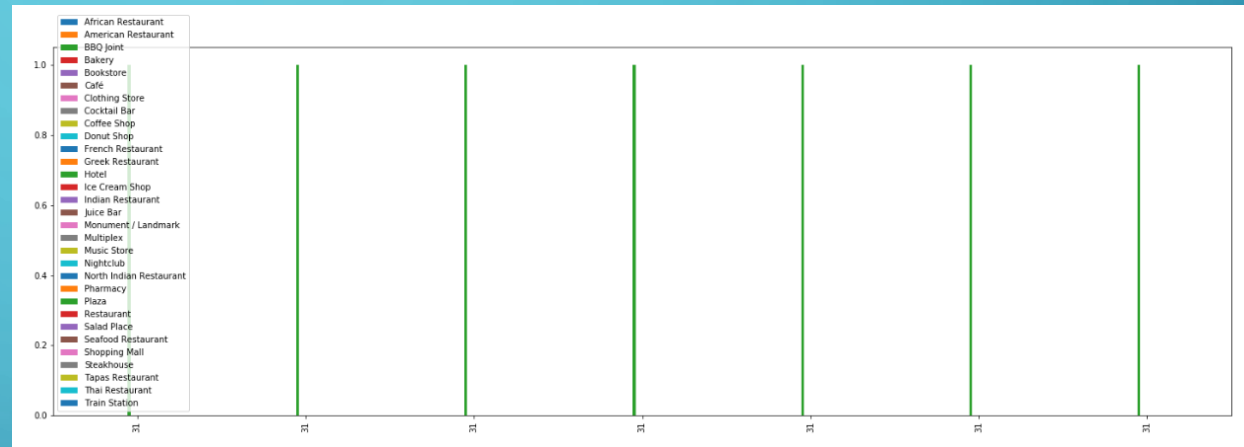
CLUSTER 4

- Based on the graph, **Cluster 4** contains only **Steak Houses** that are in Sandton.
- Of the 50 Venues that are within a radius of 500 meters in Sandton, 4 of them are **Steak Houses**.



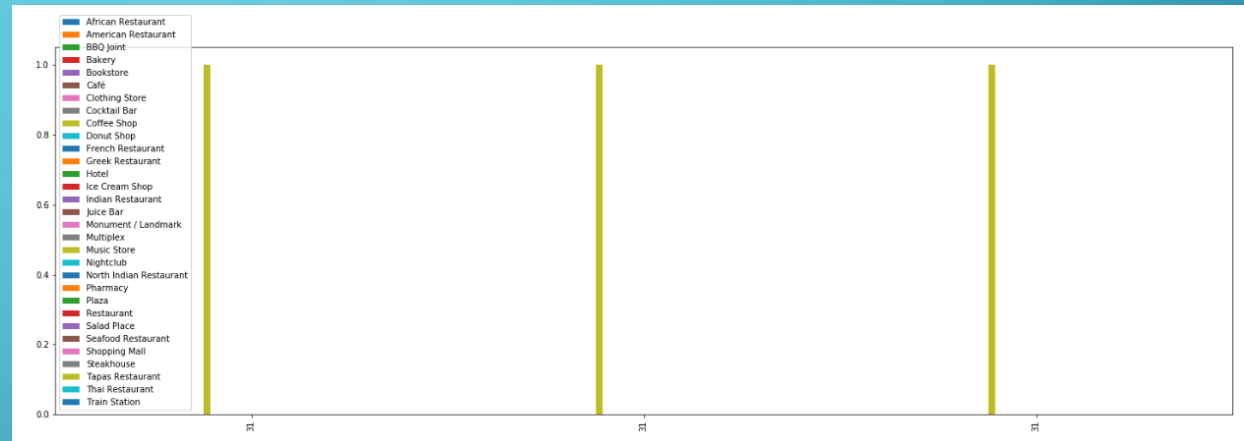
CLUSTER 3

- Based on the graph, **Cluster 3** contains only **Hotels** that are in Sandton.
- Of the 50 Venues that are within a radius of 500 meters in Sandton, 7 of them are **Hotels**.



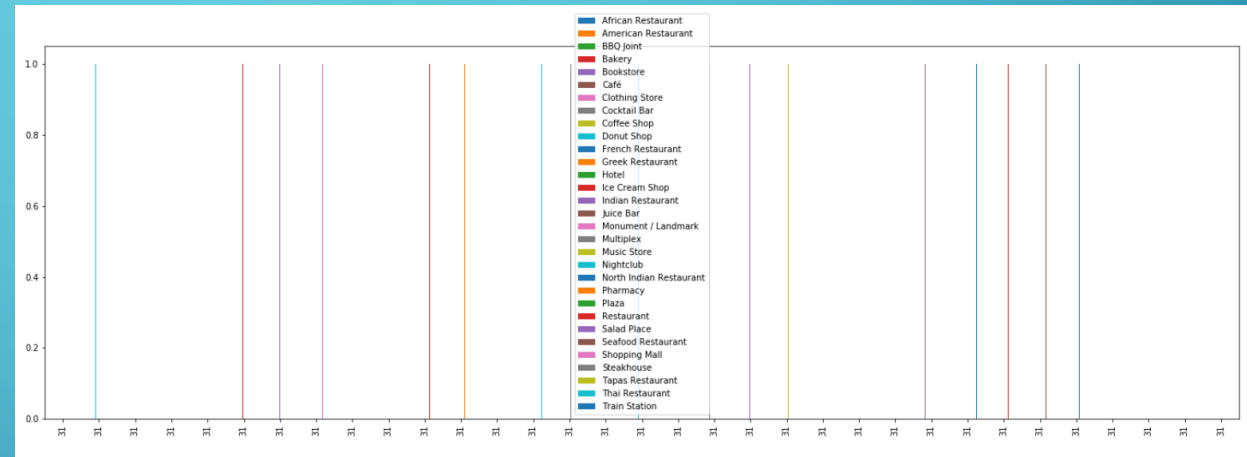
CLUSTER 2

- Based on the graph, **Cluster 2** contains only **Coffee Shops** that are in Sandton.
- Of the 50 Venues that are within a radius of 500 meters in Sandton, 3 of them are **Coffee Shops**.



CLUSTER 1

- Based on the graph, **Cluster 1** contains all the other venue categories in Sandton that are less than 3.
- Within a radius of 500 meters in Sandton.



MOST COMMON VENUE CATEGORY

- The first most common venue category was hotels.
- The second most common venue category was Steakhouse.
- The third most common venue was Coffee Shop.
- The fourth most common venue category was Clothing Store.
- The fifth most common venue was Bookstore.

	Suburb	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
0	Sandton	Hotel	Steakhouse	Coffee Shop	Clothing Store	Bookstore

CONCLUSION

In conclusion, Entrepreneurs, Entertainers and Tourists that come to Sandton can expect to find a large number of hotels to choose accommodation from. There are also a variety of Steak houses and Coffee Shops. Clothing stores and Bookstores are also available to explore.