# Introduction

## Background

South Africa is renowned for its richness in raw minerals, friendly people and wealth of opportunities. An offshore investment group wants leverage this and sees an opportunity to invest into an upmarket restaurant in the South African Market.

## Business Problem

The need is understanding what at the options for investing into a restaurant business in 3 of the key metros within South Africa being Cape Town, Johannesburg or Durban. These cities where chosen due to them biggest in South Africa for locals as well has being seen from overseas as top travel Destinations.

[Quality of life in Durban, Cape Town and Johannesburg](https://www.thesouthafrican.com/news/cape-town-vs-johannesburg-vs-durban-quality-of-life/)

[Best Holiday Destinations Durban vs Cape Town](https://afrotourism.com/travelogue/holiday-best-bet-cape-town-vs-durban/)

[Most Expensive Cities in South Africa](https://businesstech.co.za/news/lifestyle/366416/the-most-expensive-cities-in-south-africa-in-2020-pretoria-vs-joburg-vs-cape-town-vs-durban/)

Further to this, is to understand of the type of restaurants and the location of such within the cities.

# Data Sources

## Web Articles

|  |  |
| --- | --- |
| Title | Comment |
| Source | Internet |
| Extract method | Web scrape |
| Use | Review previous analysis to understand key business and tourism cities, disposable income etc. |

## Geolocator

|  |  |
| --- | --- |
| Title | Comment |
| Source | github | |
| Extract method | Web scrape | |
| Use | geocode the Suburbs | |

## Foursquare

|  |  |
| --- | --- |
| Title | Comment |
| Source | www.foursquare.com | |
| Extract method | Web scrape. Extract venue info for suburbs in city | |
| Use | this data will be used to understand the different restaurants available in a specific area | |

## Census data

|  |  |
| --- | --- |
| Title | Comment |
| Source | https://census2011.adrianfrith.com/place/798013 | |
| Extract method | Web scrape. Extract suburbs within city | |
| Use | Extract the suburbs for under the main place | |

## Tools and Modules

|  |  |
| --- | --- |
| Title | Comment |
| Juypter notebook | <https://jupyter.org/> | |
| Pandas | <https://pandas.pydata.org/> | |
| Numpy | <https://numpy.org/> | |
| IBM cloud services | <https://cloud.ibm.com/login> | |
| Geo | <https://pypi.org/project/geopy/> | |
| BeautifulSoup | <https://pypi.org/project/beautifulsoup4/> | |
| Folium | <https://github.com/python-visualization/folium> | |