Week 1:

1. A description of the problem and a discussion of the background

An Italian Restaurant is looking to open another branch due to their continued success. It is located in Sandton, Johannesburg, South Africa, and is looking to open the second branch in a neighborhood similar to Sandton.

2. A description of the data and how it will be used to solve the problem.

Since the problem involves comparing suburbs (neighborhoods), geospatial data will be used with the Four Square API to get venue data.

Since the nature of the business is weather dependent, weather data will be included in the features for the modelling of the problem. The weather measures to acquire are:

- Average temperature
- Maximum temperature
- Minimum temperature
- Maximum Wind Speed
- Average Cloud Cover
- Maximum Rainfall

Once the data is acquired, the average weather measure will be determined and combined with the data from Four Square for analysis.

The weather data will be acquired using the weatherbit.io API. They have different tier API keys, and for this project, since it is unfunded, the free API key will be used. This is limited by:

- 500 calls per day
- History Range: 4 years – Current Date