**Data**

The primary data needed for the exercise is the locality wise zip code along with corresponding longitude and latitude. This is extracted from the website [www.geonames.org](http://www.geonames.org). This website has the zip code wise longitude and latitude data for several countries. The data for India is first downloaded and from this data a csv file containing the zip code wise longitude and latitude for Mumbai is culled out for the purpose of this analysis.

The sample data of this newly created Mumbai dataset was as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Pincode | Place | State | City | Latitude | Longitude |
| 400001 | Mumbai G.P.O. | Maharashtra | Mumbai | 18.629 | 72.892 |
| 400001 | Bazargate | Maharashtra | Mumbai | 18.629 | 72.892 |
| 400001 | Town Hall (Mumbai) | Maharashtra | Mumbai | 18.629 | 72.892 |
| 400001 | Tajmahal | Maharashtra | Mumbai | 18.629 | 72.892 |
| 400001 | Stock Exchange | Maharashtra | Mumbai | 18.629 | 72.892 |

The pin code goes up to 400104. Multiple locations within same pin code is available. There are a total of 239 locations captured in the dataset used for the exploratory analysis.

Foursquare API is then used to to provide information about venues close to each location. This data is further used