Data

1. Foursquare location data will be leveraged to complete this assignment through consuming the API service available on the website.
2. Population data will be leveraged from the official source <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/comprehensive.cfm> to determine areas with lower population density which might not be suitable for opening Indian restaurants.
3. The API call will be made with below Python sample code:

*import json, requests*

*url = 'https://api.foursquare.com/v2/venues/explore'*

*params = dict(*

*client\_id='CLIENT\_ID',*

*client\_secret='CLIENT\_SECRET',*

*v='20180323',*

*ll='40.7243,-74.0018',*

*query='coffee',*

*limit=1*

*)*

*resp = requests.get(url=url, params=params)*

*data = json.loads(resp.text)*

1. Parameter details:

* *client\_id*: Obtained from my Foursquare account
* *client\_secret*: Obtained from my Foursquare account
* *ll*: Latlongs would be mapped against postal codes for areas in Toronto. This data will be obtained from Wikipedia page and geocoder module of python
* *query*: This would include various phrases commonly used in the titles of Indian restaurants listed below-
* India
* Indian
* Hindu
* Hindustan
* Bharat
* Taj
* Punjab
* Mahal
* Biryani
* Tadka
* Spice
* Spicy
* Punjabi
* Malai
* Mumbai
* Swagat
* Swagath
* Namaste
* Vindaloo
* Madras
* Dhaba
* Naan
* Roti
* Rasoi
* Dilli
* Delhi
* Pind
* Collaba
* Mughlai
* Himalaya
* Everest
* Masala
* Butter
* Tandoor
* Tandoori
* Desi
* Haldi
* Tamasha
* Palace

1. The sample response of the API:

*{*

*"meta": {*

*"code": 200,*

*"requestId": "5ac51d7e6a607143d811cecb"*

*},*

*"response": {*

*"venues": [*

*{*

*"id": "5642aef9498e51025cf4a7a5",*

*"name": "Mr. Purple",*

*"location": {*

*"address": "180 Orchard St",*

*"crossStreet": "btwn Houston & Stanton St",*

*"lat": 40.72173744277209,*

*"lng": -73.98800687282996,*

*"labeledLatLngs": [*

*{*

*"label": "display",*

*"lat": 40.72173744277209,*

*"lng": -73.98800687282996*

*}*

*],*

*"distance": 8,*

*"postalCode": "10002",*

*"cc": "US",*

*"city": "New York",*

*"state": "NY",*

*"country": "United States",*

*"formattedAddress": [*

*"180 Orchard St (btwn Houston & Stanton St)",*

*"New York, NY 10002",*

*"United States"*

*]*

*},*

*"categories": [*

*{*

*"id": "4bf58dd8d48988d1d5941735",*

*"name": "Hotel Bar",*

*"pluralName": "Hotel Bars",*

*"shortName": "Hotel Bar",*

*"icon": {*

*"prefix": "https://ss3.4sqi.net/img/categories\_v2/travel/hotel\_bar\_",*

*"suffix": ".png"*

*},*

*"primary": true*

*}*

*],*

*"venuePage": {*

*"id": "150747252"*

*}*

*}*

*]*

*}*

*}*