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**Report on Capstone Project –**

**The Battle of Neighborhoods-**

**Resolving issue of Finding a Better Place in Scarborough, Toronto**

**1. Introduction:**

The Objective of the project is to make it easy for people to explore better amenities, facilities and services in their neighborhood so as to make their life at a level of better comfort. The Project will pave way for the people to make a considerate and well planned decision in selecting their neighborhood among varied other neighborhoods in Scarborough, Toranto.

We observe that a large number of people individually and with family migrate to different states of Canada and need help in searching for good and affordable housing accommodations, availability of hospitals, public transport systems, recreational facilities and better school for their kids. The project is focused on all such individuals who are in search for a neighborhood to suit to their requirements and that fits their budget too.

The project will make it easy for the individuals to locate and access to Cafe, School, Super market, medical shops, grocery shops, mall, theatre, hospital, places of their interest etcetera so that their time and resources are utilized optimally to the best of their satisfaction and enjoy life in their own way.

The Project emphasizes on analysis of features used in the study of data available on Wikipedia on a people migrating to Scarborough, Toranto in search of a better neighborhood as a comparative analysis among other available options of neighborhoods. Among other things features include availability of median housing price and better schools according to ratings, crime rates of that particular area, road connectivity, weather conditions, good emergency management, availability of fresh water resources and treatment of waste water and excrement conveyed in sewers alongwith recreational facilities and public transport.

The project will assist people get valuable information of their choice in the neighborhood and make them more aware about the area where they plan and intend to move for better life and prosperity.

**2. Data Section**

Data Link: <https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M>

Dataset consisting of latitude and longitude, zip codes about Scarborough, Toranto has been scrapped from the link of Wikipedia for the exclusive purpose of project and without any commercial considerations.

**Foursquare API Data:**

The Project uses Foursquare.com for the purpose of getting locational information as input. The project will need data about different venues in different neighborhoods of that specific borough. As informed in the instructional video of Coursera,l Foursquare is a location data provider with information about all manner of venues and events within an area of interest. Such information includes venue names, locations, menus and even photos etc. As such, the foursquare location platform will be used as the sole data source since all the stated required information can be easily obtained through the API.

After finding the list of neighborhoods, the study then connect to the Foursquare API to procure information about venues inside each and every neighborhood. For each neighborhood, we have chosen the radius to be 100 meter as default.

The data collected from Foursquare contained information of venues within a specified distance of the longitude and latitude of the postcodes (Zipcodes). The information obtained per venue is as on below mentioned points:

1. Neighborhood

2. Neighborhood Latitude

3. Neighborhood Longitude

4. Venue

5. Name of the venue e.g. the name of a store or restaurant

6. Venue Latitude

7. Venue Longitude

8. Venue Category

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**---------------------------------------END OF WEEK 4---------------------------------------**