Capstone Project:

Walking Tour

Data

The neighborhood categorization will group venues from a list provided by Foursquare. Foursquare stores data for venues which can be accessed using various API endpoints. The EXPLORE endpoint returns a list of venues near a specified location. The response of the EXPLORE endpoints provides the id, name, location, and categories for each venue matching the search parameters. Table 2 below outlines the EXPLORE parameters used in this project.

endpoint returns a list of venues within a given radius of a location that match the given parameters. The response of the SEARCH endpoint provides the id, name, location, and categories for each venue matching the search parameters. A category parameter can be included, which limits the results to the selected categories. Table 1, below, outlines the SEARCH parameters used in this project.

Table 1

EXPLORE Endpoint Parameters		
Name	Description	Value
ll	comma separated latitude and longitude values for the location of the search	The latitude and longitude of the start location
radius	radius, in meters, from the desired search area	The radius will be calculated using the distance the user is willing to travel and the number of stops they want to make
limit	number of results to return	The maximum number of results Foursquare returns is 50

To provide a better representation of how this EXPLORE data will be used, we can cover an example from the actual data.

Table 2

Example 2	
Name	**Value**
ll	40.491242 -79.903510
radius	2400
limit	1000

Based on this search criteria a list of all the businesses within 2400m of the given coordinates will populate for the neighborhood. This is shown below in Table 3.

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Aspinwall	40.491242	-79.90351	Randita's Organic Vegan Cafe	40.490189	-79.904924	Vegetarian / Vegan Restaurant
1	Aspinwall	40.491242	-79.90351	Esspa Kozmetika Organic Skincare	40.489430	-79.901057	Spa
2	Aspinwall	40.491242	-79.90351	Labriola's Italian Market	40.488284	-79.898610	Italian Restaurant
3	Aspinwall	40.491242	-79.90351	Burgatory	40.489315	-79.892910	Burger Joint
4	Aspinwall	40.491242	-79.90351	CC's Café	40.493595	-79.914514	Italian Restaurant

From this data, the code will categorize the businesses into distinct categories that will then be used to evaluate the neighborhoods.