Introduction:

There is a family that wants to open a family run authentic Japanese restaurant in Toronto. They are not a chain and are going for the loyal reliable customer base rather than flashy tourist attraction. They want to open a restaurant in a relatively high population density area first and somewhere where there isn't a lot of similar competition and then where there isn't a lot of other restaurants either considering that they think that this will increase their chances to gain customers if they aren't spoiled for choice. They want a local supply of staples in Japanese cuisine such as fish, as these tend to go off rather quickly so ideally, they will want a nearby fresh fish market. If there is a fresh food market in all of their top regions then amount of popular attractions will be considered as the final deciding factor.

Data:

1. Data from https://en.wikipedia.org/wiki/Demographics_of_Toronto_neighbourhoods
2. Foursquare data on restaurants in the area containing keywords 'Japanese food'
3. Foursquare data on all restaurants in the area
4. Foursquare venues around top pick areas

Methodology:

Areas were first sorted by the population density and the top 20 areas with the highest density were selected. Then they were narrowed down to areas that did not have Japanese restaurants in them already. Other food venues were eliminated and two neighbourhoods emerged without any restaurants in them. These were then compared based on other venues that showed up on foursquare query considering that these might attract foot traffic.

Results:

Out of the original 20 neighbourhoods selected based on the population density the neighbourhoods were narrowed down to two as described in the methodology section. These neighbourhoods were Crescent Town and High Park North, as can be seen below, these neighbourhoods have four and six venues respectively. The population density in these neighbourhoods is 20393 people/km2 and 10434 people/km2 respectively.

Neighbourhood	Population_density	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Crescent Town	4	4	4	4	4	4	4
High Park North	6	6	6	6	6	6	6

Discussion:

From the two neighbourhoods selected we could choose to answer this issue in two different ways.

	Neighbourhood	Population_density
0	St. James Town	63765.0
1	Bay Street Corridor	43518.0
2	North York City Centre	37239.0
3	Church and Wellesley	24358.0
4	Crescent Town	20393.0
5	Regent Park	16230.0
6	Garden District	15846.0
7	Parkdale	13974.0
8	Alexandra Park	13609.0
9	Niagara	11862.0
10	Wallace Emerson	11748.0
11	Yorkville	10795.0
12	Grange Park	10793.0
13	The Annex	10614.0
14	High Park North	10434.0
15	Kensington Market	10389.0
16	Deer Park	10387.0
17	Little Portugal	10231.0
18	Dufferin Grove	9975.0
19	Little Italy	9774.0

One way would be to choose the neighbourhood with higher venue count to attract more foot traffic, however this approach might be limited in when population density is considered. Since the population density was chosen as the first point of reference and we deem it as the more important factor the approach that might make more sense could be that of choosing Crescent Town. In fact Crescent Town has the fifth highest population density in the whole of Toronto, making it a perfect location to open a restaurant with loyal local clientele.

Conclusion:

To sum up, the two choices of neighbourhood were found to open a Japanese restaurant in. Out of these choices Crescent Town was deemed to be the best and recommended for the family owned restaurant.