Selecting a place in Winnipeg for an Asian restaurant business

- Capstone project of IBM data science professional certificate

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Business Problem

Helping a business immigrant select a place in Winnipeg for opening an Asian restaurant

Winnipeg - Central Canada

- Population 750,000
- 32 Municipal Areas

Step 1 - extracting post code and location data of each area in Winnipeg

[2]:		Post Code	Area	Longitude	Latitude
	0	R3A	Centennial	-97.1489	49.9038
	1	R3B	Chinatown / Civic Centre / Exchange District /	-97.1401	49.8980
	2	R2C	Transcona	-96.9563	49.9247
	3	R3C	Broadway / The Forks / Portage and Main)Manito	-97.2184	50.0110
	4	R3E	Sargent Park / Daniel McIntyre / Inkster SE	-97.1779	49.9081

Table 1 Area table of post code, location longitude and latitude of each municipal area in Winnipeg Reference https://en.wikipedia.org/wiki/List of postal codes of Canada: R
oper.foursquare.com/docs/api-reference/venues/search/

Step 2 - Categorize areas based on density of Asian restaurant in Winnipeg

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Density of asian restaurant by area
                                                         density
                                    Fort Garry West
                                                         zero
                    Grassie / Eastern North Kildonan
19
                                       Old Kildonan
                                       Inkster West
                                       Wilkes South
                                      West Kildonan
                            St. James-Assiniboia SE
                                   Fort Garry South
                   St. Boniface South / St. Vital SE
31
                            St. James-Assiniboia NW
3
   Broadway / The Forks / Portage and Main) Manito...
2
                                          Transcona
17
                                       St. Vital SW
                                 Point Douglas East low density
27
                                 River Heights West low density
18
                   Point Douglas West / Inkster East low density
29
                      Assiniboine South / Betsworth low density
22
                             Fort Garry NW / Tuxedo low density
20
                                                    low density
16
                               Crescentwood Central
                                   St. Vital North low density
15
                                 River Heights East low density
14
                                           Elmwood low density
13
                            St. James-Assiniboia SW low density
12
                                     East Kildonan low density
11
                                    St. Boniface NE low density
                      St. James-Assiniboia NE / YWG low density
                      Minto / St. Mathews / Wolseley low density
                               North Kildonan North low density
   Chinatown / Civic Centre / Exchange District /... high density
      Fort Garry NE / University of Manitoba high density
                                   St. Boniface NW high density
         Sargent Park / Daniel McIntyre / Inkster SE high density
4
                                         Centennial high density
```

Table 2 Asian restaurant density table of each municipal area in Winnipeg Reference

Foursquare https://developer.foursquare.com/docs/api-reference/venues/search/

Step 3 Create Winnipe map marking recommendation areas



Figure 1 Winnipeg map with recommended areas (purple – zero density; red – low density)

Conclusion

Areas with low density of Asian restaurant are recommended to open a new business to gain the full potential business.