# Data

**A description of the data:** This project will be using geolocation data collected from FourSquare to solve the problem. Additional data will also be collected through online websites, these data includes which area has the most venues, and in this project area with the most venues will be considered as the most suitable place for opening a restaurant, due to the visibility of the restaurant. We will also consider the population that is in that region (Hong Kong Island, Kowloon and New Territories). The population data will be collected from Wikipedia, the data will then be converted in to a data frame combined with the other data collected from FourSqaure.

The following is the example of the data frame,

| **District** | **[Chinese](https://en.wikipedia.org/wiki/Traditional_Chinese_characters" \o "Traditional Chinese characters)** | **Population[*[when?](https://en.wikipedia.org/wiki/Wikipedia:Manual_of_Style/Dates_and_numbers" \l "Chronological_items" \o "Wikipedia:Manual of Style/Dates and numbers)*]**[[6]](https://en.wikipedia.org/wiki/Districts_of_Hong_Kong" \l "cite_note-6) | **Area (km²)** | **Density (/km²)** | **Region** |
| --- | --- | --- | --- | --- | --- |
| [Central and Western](https://en.wikipedia.org/wiki/Central_and_Western_District" \o "Central and Western District) | 中西區 | 244,600 | 12.44 | 19,983.92 | [Hong Kong Island](https://en.wikipedia.org/wiki/Hong_Kong_Island" \o "Hong Kong Island) |
| [Eastern](https://en.wikipedia.org/wiki/Eastern_District_(Hong_Kong)" \o "Eastern District (Hong Kong)) | 東區 | 574,500 | 18.56 | 31,217.67 | [Hong Kong Island](https://en.wikipedia.org/wiki/Hong_Kong_Island" \o "Hong Kong Island) |
| [Southern](https://en.wikipedia.org/wiki/Southern_District_(Hong_Kong)" \o "Southern District (Hong Kong)) | 南區 | 269,200 | 38.85 | 6,962.68 | [Hong Kong Island](https://en.wikipedia.org/wiki/Hong_Kong_Island" \o "Hong Kong Island) |
| [Wan Chai](https://en.wikipedia.org/wiki/Wan_Chai_District" \o "Wan Chai District) | 灣仔區 | 150,900 | 9.83 | 15,300.10 | [Hong Kong Island](https://en.wikipedia.org/wiki/Hong_Kong_Island" \o "Hong Kong Island) |
| [Sham Shui Po](https://en.wikipedia.org/wiki/Sham_Shui_Po_District" \o "Sham Shui Po District) | 深水埗區 | 390,600 | 9.35 | 41,529.41 | [Kowloon](https://en.wikipedia.org/wiki/Kowloon" \o "Kowloon) |
| [Kowloon City](https://en.wikipedia.org/wiki/Kowloon_City_District" \o "Kowloon City District) | 九龍城區 | 405,400 | 10.02 | 40,194.70 | [Kowloon](https://en.wikipedia.org/wiki/Kowloon" \o "Kowloon) |
| [Kwun Tong](https://en.wikipedia.org/wiki/Kwun_Tong_District" \o "Kwun Tong District) | 觀塘區 | 641,100 | 11.27 | 56,779.05 | [Kowloon](https://en.wikipedia.org/wiki/Kowloon" \o "Kowloon) |
| [Wong Tai Sin](https://en.wikipedia.org/wiki/Wong_Tai_Sin_District" \o "Wong Tai Sin District) | 黃大仙區 | 426,200 | 9.30 | 45,645.16 | [Kowloon](https://en.wikipedia.org/wiki/Kowloon" \o "Kowloon) |
| [Yau Tsim Mong](https://en.wikipedia.org/wiki/Yau_Tsim_Mong_District" \o "Yau Tsim Mong District) | 油尖旺區 | 318,100 | 6.99 | 44,864.09 | [Kowloon](https://en.wikipedia.org/wiki/Kowloon" \o "Kowloon) |
| [Islands](https://en.wikipedia.org/wiki/Islands_District" \o "Islands District) | 離島區 | 146,900 | 175.12 | 825.14 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [Kwai Tsing](https://en.wikipedia.org/wiki/Kwai_Tsing_District" \o "Kwai Tsing District) | 葵青區 | 507,100 | 23.34 | 21,503.86 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [North](https://en.wikipedia.org/wiki/North_District_(Hong_Kong)" \o "North District (Hong Kong)) | 北區 | 310,800 | 136.61 | 2,220.19 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [Sai Kung](https://en.wikipedia.org/wiki/Sai_Kung_District" \o "Sai Kung District) | 西貢區 | 448,600 | 129.65 | 3,460.08 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [Sha Tin](https://en.wikipedia.org/wiki/Sha_Tin_District" \o "Sha Tin District) | 沙田區 | 648,200 | 68.71 | 9,433.85 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [Tai Po](https://en.wikipedia.org/wiki/Tai_Po_District" \o "Tai Po District) | 大埔區 | 307,100 | 136.15 | 2,220.35 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [Tsuen Wan](https://en.wikipedia.org/wiki/Tsuen_Wan_District" \o "Tsuen Wan District) | 荃灣區 | 303,600 | 61.71 | 4,887.38 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [Tuen Mun](https://en.wikipedia.org/wiki/Tuen_Mun_District" \o "Tuen Mun District) | 屯門區 | 495,900 | 82.89 | 5,889.38 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |
| [Yuen Long](https://en.wikipedia.org/wiki/Yuen_Long_District" \o "Yuen Long District) | 元朗區 | 607,200 | 138.46 | 4,297.99 | [New Territories](https://en.wikipedia.org/wiki/New_Territories" \o "New Territories) |

With the data combined, we will be able use clustering approach in order to find out which location is the most visible to people.