Comparing Neighborhoods in Dubai and Doha

Data

The project goal is to cluster similar neighborhoods in Dubai and Doha leveraging **Foursquare location data**. With the final report, people will be able to easily find neighborhoods with the characteristics they are looking for in both cities.

Using Foursquare API and some Data Science tools and techniques, we can segment and compare neighborhoods of the two cities.

To get a detailed final report, we will follow the steps below in a Jupyter Notebook:

- 1) Using Requests and BeautifulSoup packages to web scrape the wikipedia pages of Dubai and Doha, we get a list of their neighborhoods and store it into a Pandas dataframe.
- 2) With Geocoder Python, we get the latitude and the longitude coordinates of each neighborhood.
- 3) Once we have the latitude and the longitude coordinates, we call Foursquare API to explore each neighborhood and list the most common venues of them and group the information into a new Pandas dataframe.
- 4) Having the Foursquare information of the neighborhoods, we use K-Means method, from scikit-learn library, to cluster neighborhoods based on their similarities.

The final result will help the person who is moving from Dubai to Doha, and vice versa, to analyze the neighborhoods and find the one that best suits his or her needs and wishes.