

## **Data:**

**The data we will use to solve this problem are:**

- The list of restaurants and hotels in Dakar, Senegal.
- The data provided by these companies to be visible and in contact with the public.
- The geolocation data (longitude and latitude) of Foursquare that will be able to locate these restaurants and hotels

## **Sources of Data:**

These links [https://www.tripadvisor.fr/Restaurants-g293831-Dakar\\_Dakar\\_Region.html](https://www.tripadvisor.fr/Restaurants-g293831-Dakar_Dakar_Region.html) , and <https://www.au-senegal.com/les-restaurants-de-dakar,9548.html> redirect to sites that contain lists of restaurants and hotels by neighborhood, culinary specialty, addresses (phone number, email...), etc...

We will use webscraping techniques to collect these data only when we have legal permission to access them by webscraping, using Python packages such as BeautifulSoup, Requests.get, etc... Otherwise we will just collect these data manually in Excel and CSV formats in a structured and well cleaned way.

Then, we will use the geocoder package of Python to obtain the geospatial coordinates, notably the longitude and latitude of the exact locations and districts of Dakar, where these hotels and restaurants are located.

Then, we will use the API of Foursquare and this link:

<https://fr.foursquare.com/explore?mode=url&near=S%C3%A9n%C3%A9gal&nearGeoid=72057594040173598&q=Restaurant> , to get even more some complementary data of longitude and latitude of these zones and districts of Dakar where these restaurants and hotel are located. This project will require a lot of Data Science skills (Data mining, Data visualisation, webranging, Machin learning such as the clustering and classification models, etc...) and a primordial use of Foursquare the are geolocation API, to be able to achieve it.