

Seafoods restaurant in Paris (Mohammed Bouayoun)



Figure 1: Paris

1. Introduction

Paris is the capital and most populous city of France, with a population of 2,148,271 residents in an area of 105 square kilometers (41 square miles). Since the 17th century, Paris has been one of Europe's major centers of finance, diplomacy, commerce, fashion, science and the arts. The City of Paris is the center and seat of government of the Ile-de-France, or Paris Region, which has an estimated official 2020 population of 12,278,210, or about 18 percent of the population of France.

&euro

The Paris Region had a GDP of €709 billion (\$808 billion) in 2017. According to the Economist Intelligence Unit Worldwide Cost of Living Survey in 2018, Paris was the second most expensive city in the world, after Singapore, and ahead of Zürich, Hong Kong, Oslo and Geneva.[4] Another source ranked Paris as most expensive, on a par with Singapore and Hong Kong, in 2018.



Figure 2: Seafood

2. Business Problem

Fresh fish is a highly perishable food product, so it must be eaten promptly or discarded; it can be kept for only a short time. In many countries, fresh fish are filleted and displayed for sale on a bed of crushed ice or refrigerated. Fresh fish is most commonly found near bodies of water, but the advent of refrigerated train and truck transportation has made fresh fish more widely available inland.

The closest sea to Paris is 194 km away, it's necessary to be close to the fish shops to get fresh fish for our new restarants.

3. Interest

The objective of this projects is to find the best locations to open a new seafood restaurant near fish shop to get fresh fish and seafood.

Paris is a city where there are various peoples in the world, many of them prefer fish to meat, such as Muslims, Jews and Asians.

4. Data

4.1 IRIS Data

In order to prepare for the dissemination of the 1999 population census, INSEE had developed a division of the territory into homogenously sized grids called IRIS2000. This acronym stood for "Ilots Regrouped for Statistical Information" and referred to the target size of 2,000 inhabitants per elementary grid cell.

Since then, IRIS has been the basic building block for the dissemination of infra-municipal data. It must comply with geographical and demographic criteria and have unambiguously identifiable contours that are stable over time.

Municipalities with at least 10,000 inhabitants and a high proportion of municipalities with 5,000 to 10,000 inhabitants are divided into IRIS. This division constitutes a partition of their territory. France has approximately 16,100 IRIS, 650 of which are in the overseas departments.

By extension, in order to cover the whole territory, each of the communes not divided into IRIS is considered as one IRIS.

There are three types of IRIS:

- Housing IRIS: their population is generally between 1,800 and 5,000 inhabitants. They are homogeneous in terms of habitat type and their boundaries are based on the major cuts in the urban fabric (main roads, railways, waterways, etc.).
- Activity IRISs: they have more than 1,000 employees and have at least twice as many salaried jobs as the resident population.
- Miscellaneous IRIS: these are large specific areas with few inhabitants and a large surface area (leisure parks, port areas, forests, etc.).

Attribute Definition

iris : Sequential IRIS identifier *nom_iris* : IRIS name

typ_iris : IRIS type

dep : borough

insee_com : neighbourhood code

nom_com : neighbourhood name

code_iris : IRIS code

geometry : area of IRIS

4.2 Administrative districts

Is Geojson dataset contains names of Paris district.

https://opendata.paris.fr/explore/dataset/quartier_paris/download/?format=geojson&timezone=Europe/Berlin&lang=fr

4.3 Foursquare API

With Foursquare API we have seafoods restaurants and fish shop.

Source of data

- The IRIS dataset :
(<https://data.iledefrance.fr/explore/dataset/iris/download/?format=geojson&timezone=Europe/Berlin&lang=fr>)
- Foursquare API
Geocoder
- Administrative districts :
https://opendata.paris.fr/explore/dataset/quartier_paris/download/?format=geojson&timezone=Europe/Berlin&lang=fr

we can use other dataset if necessary such as fish shops : <https://www.data.gouv.fr/fr/datasets/r/c627e81a-a353-462d-a471-c2e645a9d14c>