



Hotels & Venues in Paris

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Introduction

Background

Paris is a beautiful city. 11 years ago I fell in love with her. I was participating in a program in France so I was able to visit the city many times. As a tourist I was in awe with the immensity of the city, the cultural diversity and the broad range of things to do. It has to be this way, with a population over 2 million Paris is known as one of Europe's cultural capitals. (Office du Tourisme et des Congrès, 2018)

It's also very known that tourism is one of France's main features and the base of the country's 9% GDP. Paris received approximately 24.5 million visitors in 2018, and considering that is one of the must-see places in France it will be very useful to design a tool that allows anyone who's interested to find venues and activities near the hotel locations.

Problem

This project aims to answer the following questions: 1. Is it possible to classify hotels according to the venues available and current events held in Paris? 2. What will be the best hotel in terms of proximity to venues and events in Paris? 3. Which borough has the best classified hotels?

Interests

Anyone with interests of visiting Paris. Or perhaps hotel owners or investors who are analyzing any spot on Paris to install a new hotel based on actual venues and possible events held in the city.

Data

The process of data collection will be an easy one. The French government is supporting an initiative related to accomplish specific goals regarding open data. This will be helpful towards the completion of the project.

Data used

Paris is organized in 20 boroughs, called "arrondissements". I'll be using data related to the borough, which will be the base for setting up the project data. This data will be obtained from Paris' Open Data Site (<https://opendata.paris.fr>) using the API:



	Borough Id	Short name	Long name	Latitude	Longitude
0	1	1er Ardt	Louvre	48.862563	2.336443
1	2	2ème Ardt	Bourse	48.868279	2.342803
2	3	3ème Ardt	Temple	48.862872	2.360001
3	4	4ème Ardt	Hôtel-de-Ville	48.854341	2.357630
4	5	5ème Ardt	Panthéon	48.844443	2.350715

For every borough, I’ll analyze the hotels. Data from the hotels can be obtained from Tourpedia, a site that collects information from Facebook, Foursquare, Bookings and Google (<http://tourpedia.org/api/getPlaces?category=accommodation&location=Paris&name=>):

	id	name	address	lat	lng
0	231609	Pages d'histoire Librairie Clio	8 Rue Bréa, Paris, France	48.843165	2.329972
1	231038	Hotel Résidence des Halles	4 Rue des Halles, Paris, France	48.859223	2.347343
2	231998	Centre d'animation Maurice Ravel	6 Avenue Maurice Ravel, Paris, France	48.841345	2.411647
3	231934	Laforet Immobilier	273 Rue des Pyrénées, Paris, France	48.867824	2.396152
4	231930	Atlanthe Immobilier	86 Rue de Maubeuge, Paris, France	48.879690	2.350003

In order to analyze each hotel, I’ll consider data from current events held in Paris obtained from Paris’ Open Data Site (<https://opendata.paris.fr>):

	id	name	category	end_date	access	address	lat	lon	zipcode
0	82415	Visite guidée : Montmartre au cinéma	Animations -> Visite guidée	2019-08-17T15:00:00+00:00	libre	151B, rue Marcadet	48.891247	2.338471	75018
1	82407	Les différentes sources de financement de votr...	Animations -> Atelier / Cours	2019-09-18T19:30:00+00:00	reservation	54 rue Jean-Baptiste Pigalle	48.881041	2.336020	75009
2	82395	La Bibliothèque Edmond Rostand au square I	Animations -> Loisirs / Jeux	2019-08-08T10:30:00+00:00	libre	29 boulevard de Reims	48.890589	2.299701	75017
3	82389	Fête des jardins : bibliothèque à la Butte-du-...	Événements -> Fête / Parade	2019-09-14T15:00:00+00:00	libre	5, avenue Debidour	48.881898	2.398832	75019
4	82385	Concours de confitures d'été, 2ème édition	Animations -> Loisirs / Jeux	2019-09-07T15:30:00+00:00	libre	132 rue de la Glacière	48.827294	2.342083	75013

As Paris venues using the Foursquare API(foursquare.com) :

	Hotel	Hotel Latitude	Hotel Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Pages d'histoire Librairie Clio	48.843165	2.329972	Amorino	48.844723	2.332110	Ice Cream Shop
1	Pages d'histoire Librairie Clio	48.843165	2.329972	Le Relais de l'Entrecôte	48.842525	2.328737	Steakhouse
2	Pages d'histoire Librairie Clio	48.843165	2.329972	Le Timbre	48.844240	2.329868	French Restaurant
3	Pages d'histoire Librairie Clio	48.843165	2.329972	Le Six Hotel	48.843793	2.328207	Hotel
4	Pages d'histoire Librairie Clio	48.843165	2.329972	Le Bistrot des Campagnes	48.840981	2.330782	French Restaurant
5	Pages d'histoire Librairie Clio	48.843165	2.329972	La Rotonde	48.842403	2.329193	French Restaurant
6	Pages d'histoire Librairie Clio	48.843165	2.329972	Le Bistrot du Dôme	48.842079	2.329204	Seafood Restaurant
7	Pages d'histoire Librairie Clio	48.843165	2.329972	My Noodles	48.841457	2.331435	Noodle House
8	Pages d'histoire Librairie Clio	48.843165	2.329972	Toritcho	48.842578	2.326067	Japanese Restaurant
9	Pages d'histoire Librairie Clio	48.843165	2.329972	Rosebud	48.841735	2.328106	Cocktail Bar
10	Pages d'histoire Librairie Clio	48.843165	2.329972	Théâtre Lucernaire	48.844201	2.330273	Theater

So, basically I will try to combine venues and events with hotels in order to determine which are the “best” hotels. And then I will analyze the boroughs.