

IBM DATA SCIENCE

Applied Data Science Capstone

The Battle of Neighbourhoods (Part-1)

Finding Best Venues, Finding Best Neighbourhoods, Segmenting and Clustering Neighbourhoods in Mumbai City

Introduction

Mumbai is the capital city of the Indian state of Maharashtra. According to UN, as of 2018, Mumbai was the second most populous city in India after Delhi and the seventh most populous city in the world with a population of almost 20 million. In 2008, Mumbai was named an alpha world city. It has the highest number of millionaires and billionaires among all cities in India. Mumbai is home to three UNESCO World Heritage Sites: the Elephanta Caves, Chhatrapati Shivaji Maharaj Terminus, and the city's distinctive ensemble of Victorian and Art Deco buildings.

Mumbai is the financial, commercial and entertainment capital of India. It is also one of the world's top ten centres of commerce in terms of global financial flow, generating 6.16% of India's GDP and accounting for 25% of industrial output, 70% of maritime trade in India and 70% of capital transactions to India's economy. Mumbai's billionaires had the highest average wealth of any city in the world in 2008. The city houses important financial institutions and the corporate headquarters of numerous Indian companies and multinational corporations. It is also home to some of India's premier scientific and nuclear institutes. The city also houses India's Hindi (Bollywood) and Marathi cinema industries. Mumbai's business opportunities attract migrants from all over India. Tourists from various countries around the world visit Mumbai.

With such a huge population and many venues for various purposes its often hard to choose the best one. Therefore, this project will help user decide best neighborhoods, best venues, etc.

Problem

Note: Best is selected for the category of venue given by user as input.

To find the answers to the following questions:

- What are the places of Mumbai City that have top rated venues of the given category?
- What are the top-rated venues of Mumbai City of the given category?
- Which are the best places to stay if you prefer particular type of venues such as Gyms, Pubs, Italian Restaurant, Chinese Restaurant, etc. ?
- How are the neighborhoods around the Mumbai clustered?