The numerous neighborhoods of Mumbai offer a wide range of opportunities for people to open offices and gyms. The recommender looks at different neighborhoods in Mumbai to offer the best location for people to open a gym or a fitness center

Recommender for building a Fitness Center in Mumbai

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Introduction

The rising awareness of fitness and its importance for the wellbeing of people led me to choose the issue of locating areas in Mumbai where the fitness industry would flourish. Mumbai being one of the biggest metros in the world has a booming population and multiple neighborhoods offering unique opportunities to set up a business. Research shows that on an average 20 million requests are made to google with the search phrase "fitness near me". The revenue generated by the fitness industry in Mumbai alone was Rs. 1200 crore ($159mil) in 2017 that grew to Rs. 2000 crore ($265mil) in 2019.

Business Problem

The massive revenue and growth have sparked an increasing number of businessmen and fitness enthusiasts alike to get in on the game. The increasing competition in the marketplace requires businesses to make informed decisions about the locations at which new gyms should be open. To be able to compete in the market, the fitness industry is diversifying with respect to the kind of gyms to setup. There is an increase in fitness sector opening up doors to avenues that were previously non-existent like climbing, cross-fit, spin classes, hot yoga, martial arts just to name a few. The recommender tries to look at the clusters of gyms as a whole in each area followed by the distribution of types of fitness industries to help the stakeholder to make an informed decision about the location and kind of gym to open up.

Data

Data Requirements

1. The complete list of neighborhoods in Mumbai. The list provides us with valuable information about the number of suburbs and districts (boroughs) associated with the city of Mumbai, the financial capital of India.

2. The latitude and longitudes of each suburb to extract information about venues around these suburbs which can further be filtered to extract information about gyms in those areas.

Data Source

1. The complete list of neighborhoods in Mumbai was obtained by a simple google search. The Wikipedia page https://en.wikipedia.org/wiki/List_of_neighbourhoods_in_Mumbai lists out all the necessary data that we can scrape off using beautifulsoup package in

python. The coordinates of these neighborhoods can then be extracted using Geocoder package in Python.

2. Foursquare API can then be used to explore each one of these neighborhoods to extract venue information. The venues can be filtered out by using the *fitness* key phrase which gives us all the information we need for creating clusters and show frequency of occurrence of gyms in that neighborhood.