

Coursera Capstone Project

IBM Applied Data Science Profession course

Opening a resort in Jodhpur,Rajasthan,India

**By: Gaurav Mundhra
B.Tech Student (NIIT University)**

Jodhpur, the heart of Rajasthan and the majestic jewel of her eternal crown, illuminate the Thar, enriching the desert with entrepreneurship, scholarship and art.

Destination Weddings in Jodhpur have been very popular. Everything that has panache attached to it is for a very strong reason indeed. It must have something so very profoundly unique about it for it to have gained that popularity. Jodhpur is a mesmerizing city altogether. As soon as you set foot here, you will be marveled by this colourful, scenic yet elegant city, with its Forts, Palaces, Gardens, Lakes and of course the placid & undisturbed Aravalis that outline the city. It would be erroneous to leave out the Sand Dunes elegantly placed right outside the city that makes this destination very inviting to those who appreciate beauty, art, culture and history.

Due to its high tourist ratio in all season and it's popularlarity for destination wedding.

Running a resort chain here is a very good business opportunity to boost your financial health.

As there are many hotels resorts already running, to open a new chain of resort is very competitive.

Choosing a location for a new resort is one of the most important decisions entrepreneurs make during the planning phase of launching ventures .

Business Problem

The objective of this project is to analyse and select best location to set up a new resort using machine learning algorithms and data exploratory analysis using data of location of running hotels and resorts in different locations.

Data and Methodology

The data will be scraped from web pages using web scraping tools such as BeautifulSoup. All the popular landmarks name will be extracted from wikipedia or makemytrip.

Sources of data :

"[https://housing.com/in/buy/jodhpur rajasthan/all- localities](https://housing.com/in/buy/jodhpur%20rajasthan/all-localities)"

"<https://www.makemytrip.com/hotels/hotels-jodhpur-area-list.html>"

The second part is to find location-coordinates of extracted location using geocoder and then using folium to map all the locations.

Next, we will explore all the locations using foursquare api and get all nearby venues , grouping it by all location and selecting hotels and resorts as features.

Using groupby on location and taking mean of all values.

Now we have the distribution of hotels and resort for every location.

Now clustering the data, and selecting the best location for your business.