

IBM Data Science Professional Certificate

Course 9 – Applied Data Science Capstone

Final Report

Analysis on availability of Parks in Delhi **(the capital city of India)**



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Introduction-

Delhi is a city which is situated in northern part of India . It is basically divided into two parts New Delhi and Old Delhi . New Delhi is the capital city of India . In this project we will be taking about whole Delhi city which includes the area of both new and old Delhi city.

Delhi has got a rich historical heritage. It has always been the center of power for entire India for more than 12 centuries. Through its architecture which includes forts ,palaces, gates, arcs , government buildings and parks we can clearly observe the historical magnificent of this city . The parks in Delhi have always been the place to relax , enjoy time with family and most importantly being close to nature and roots for the people of Delhi . These parks play a significant role in not just beautifying the city but also maintaining the pollution level of the city which unfortunately is very high if we talk about Delhi. Some part of the Delhi has got good number of parks but still there are many areas of the city which needs more parks . This problem is usually not addressed by government or real estate development companies which exploit the land in just making concrete floors but do not consider the suffering of city or ultimately people . So in this project we will be analyzing this problem in a more analytical way.

Business or Environmental Problem-

It is moreover an environmental problem which has link to business as well. Real Estate projects with parks in the areas which have less parks can be an attractive deal for customer. It is important to handle this problem in a more analytical way and the problem statement for this problem would be how we can decide which part of the Delhi has got good number of parks and which are facing the scarcity of them?

Beneficiaries of the Project-

- 1) This project could be beneficial for government while developing infrastructure .
- 2) This project could be beneficial for Real Estate Companies making new projects .
- 3) This project could be beneficial for people of Delhi for raising their issues in front of authorities.

Data Required-

- 1) List of all the neighborhoods of Delhi city .
- 2) Latitudinal and Longitudinal data of these neighborhoods .
- 3) Venue data of these neighborhood particularly availability of parks in these neighborhood.

Data Sources –

1. (https://en.wikipedia.org/wiki/Category:Neighborhoods_in_Delhi) From this Wikipedia page we are taking out list of neighborhood of Delhi city. We will be using web scraping technique to extract this list with the help of python package called BeautifulSoup.
2. To get the geographical coordinates of these neighborhood we will be using Python package called Geocoder .
3. To get the venues data related to the neighborhood we will be using Foursquare API . Foursquare is widely used among developers for geospatial data. In venues we will particularly focus on parks present in the neighborhood.