Spaces for Artists in New Delhi

Problem Statement

The spoken word community has seen a recent boom in the Indian subcontinent. Performance poetry, orr slam poetry, or spoken word as it is commonly referred to, has found its place in most metropolitan areas, such as Mumbai, Bangalore, Kolkata, Hyderabad, etc. However, the rise of independent spoken word artists in the capital of the country, New Delhi, is still hinged upon a few key factors. Here, quality dominates over quantity, and the small, highly overpopulated capital is home to boundless talent. The spaces that artists need to grow, spaces that are clean, safe, accessible, and most importantly, a positive atmosphere, are of the essence.

In one of the busiest cities in the world, where can artists find the space to grow and become better? This includes places for poetry showcases, for recitals, for practice, so on and so forth. Ideal spots include bookstores, cafes, theatres and parks. How does one find such nooks in the bustling streets of New Delhi?

Data Acquisition

The data used in this project comes from two sources, firstly the wikipedia page for Neighborhoods in Delhi, https://en.wikipedia.org/wiki/Category:Neighbourhoods_in_Delhi, and secondly the Foursquare API data collected from this neighborhood data.

For data acquisition, initially, we perform web scraping to get the data from the wikipedia page. After that, having successfully set up our Foursquare data, we use the longitude and latitude to explore the exact spots we are looking for. Using Foursquare API, we create dataframes of Bookstores, Cafes, Theatres and Parks.

	name	categories	address	lat	lng	postalCode
0	Oxford Bookstore	Bookstore	81 Block N, Outer Circle, Connaught Place	28.631343	77.222229	110001
1	Full Circle Bookstore	Bookstore	1st & 2nd Flr., 23, Middle Lane, Khan Market	28.600200	77.227198	110003
4	Famous book store	Bookstore	25	28.627615	77.219743	110001
5	Lakshmi Book Store	Bookstore	18 Janpath Bhawan	28.629590	77.218506	110001

THE BOOKSTORE DATAFRAME

	name	categories	address	lat	lng
4	Cafe Coffee Day	Café	Outer Circle Connaught Place	28.631340	77.221726
5	Cafe	Café	CMYK	28.586478	77.226498
6	Cafe Coffee Day	Café	Pallavi AWWA Complex, Chanakyapuri	28.595247	77.171954
8	Cafe Coffee Day	Café	Connaught Place	28.633841	77.217909
11	Café Nirvana	Café	Main Bazar Rd.	28.641334	77.214683
12	1 Cafe Lounge	Café	Outer Circle, Connaught Place	28.633142	77.222518
21	Triveni Terrace Cafe	Café	Triveni Kala Sangam	28.627295	77.232677
22	Cafe Coffee Day	Café	Delhi Airport Metro Express	28.617903	77.188474
23	The Pool Cafe @ The Lodhi Hotel	Café	The Lodhi Hotel	28.591559	77.238278
24	Cafe Delhi Heights	Café	68/1, Janpath, Atul Grove Road, Janpath, Conna...	28.627842	77.219860
26	Cafe, Hyatt Regency	Café	Bhikaji Cama Place, Ring Rd	28.569524	77.185403
27	Cafe Coffee Day	Café	Shankar Road	28.638417	77.180235

THE CAFE DATAFRAME

	name	categories	address	lat	lng
0	Akshara Theatre | अक्षरा थिएटर	Theater	11-B, Baba Kharak Singh Marg	28.625665	77.203379
3	little theatre group	Theater	COPERNICUS MARG	28.621804	77.231612
4	asmita theatre	Theater	Nav shakti school	28.632810	77.241051
6	Open Air Theatre	Indie Movie Theater	Taurus	28.598426	77.141919
8	The hoshruba Theatre Company	Theater	209 A Peacock Lane	28.547016	77.213792
9	ARIA Music & Theatre Conservatory	Music Venue	C-52 A	28.646652	77.122512
10	Open Air Theatre	College Theater	JNU UNIVERSITY	28.548194	77.168010
12	Oddbird Theatre	Indie Theater	Dhan Mill Compound, 100 Foot Road, SSN Marg, P...	28.506228	77.183645
13	The Atre Yoga Studio	Yoga Studio	252-A, Nanak Bhavan	28.548267	77.211383

THE THEATRES DATAFRAME

	name	categories	address	lat	lng
2	Pandara Rd Local Park	Park	Pandara Park	28.603520	77.231580
3	Nehru Park | नेहरू पार्क (Nehru Park)	Park	Chanakyapuri	28.591798	77.192860
6	Triangle Park	Park	Pandara Road	28.604606	77.228823
7	Gulmohar Park Road	Park	177 Adhar Shila	28.559251	77.213404
10	Deer Park	Park	Safdarjung Enclave	28.558191	77.193814
11	Panchsheel Park | पंचशील पार्क	Park	Josip Broz Tito Marg	28.553746	77.228652
16	Thyagraj Park	Park	Thyagraj Park	28.578247	77.214983
18	Central Park	Park	Connaught Place	28.632614	77.219299
28	Pandara Park	Park	Pandara Park	28.606781	77.233019

THE PARK DATAFRAME

Data Cleaning

As for data cleaning, every time we get the data for Bookstores, Cafes, Theatres and Parks, we clean the created dataset to get rid of repeated values, blank values, and values that do not bring any significant input to our dataset, such as pincode or state. Cleaning the datasets in this manner ensures that we have only the most accurate and reliable data.

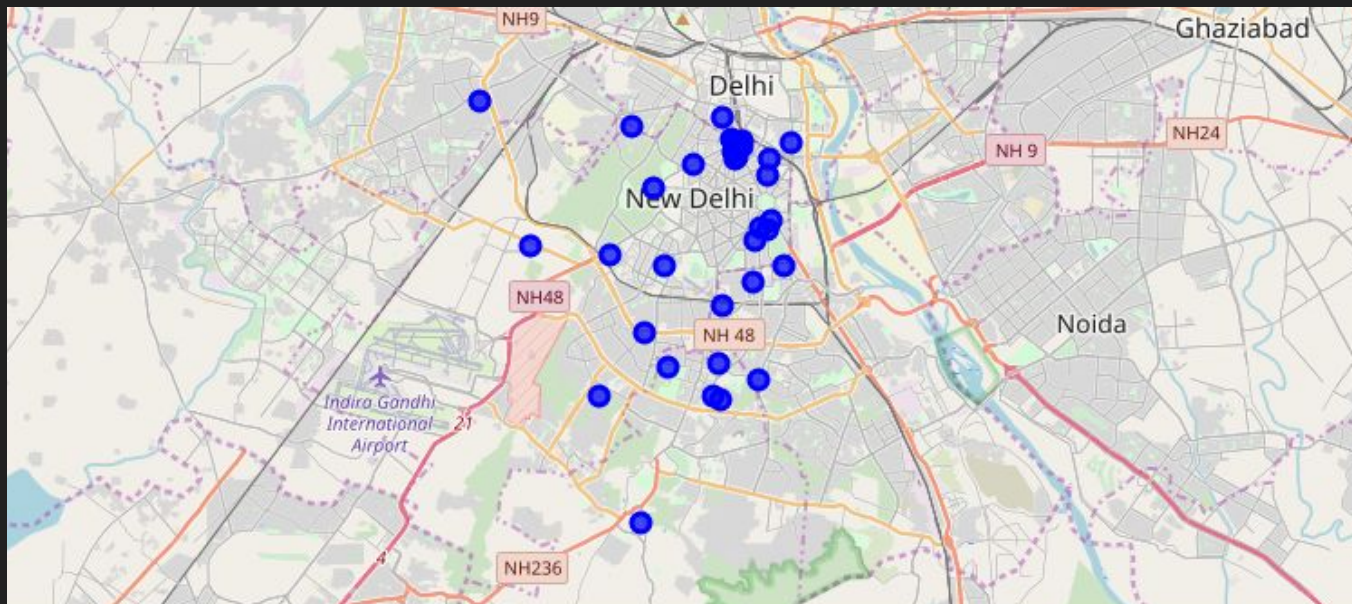|	address	categories	lat	lng	name
2	Pandara Park	Park	28.603520	77.231580	Pandara Rd Local Park
3	Chanakyapuri	Park	28.591798	77.192860	Nehru Park | नेहरू पार्क (Nehru Park)
6	Pandara Road	Park	28.604606	77.228823	Triangle Park
7	177 Adhar Shila	Park	28.559251	77.213404	Gulmohar Park Road
10	Safdarjung Enclave	Park	28.558191	77.193814	Deer Park
11	Josip Broz Tito Marg	Park	28.553746	77.228652	Panchsheel Park | पंचशील पार्क
16	Thyagraj Park	Park	28.578247	77.214983	Thyagraj Park
18	Connaught Place	Park	28.632614	77.219299	Central Park
28	Pandara Park	Park	28.606781	77.233019	Pandara Park
0	81 Block N, Outer Circle, Connaught Place	Bookstore	28.631343	77.222229	Oxford Bookstore
1	1st & 2nd Flr., 23, Middle Lane, Khan Market	Bookstore	28.600200	77.227198	Full Circle Bookstore
4	25	Bookstore	28.627615	77.219743	Famous book store
5	18 Janpath Bhawan	Bookstore	28.629590	77.218506	Lakshmi Book Store
4	Outer Circle Connaught Place	Café	28.631340	77.221726	Cafe Coffee Day
5	CMYK	Café	28.586478	77.226498	Cafe

THE FINAL DATAFRAME

Methodology

Having acquired and cleaned the data as given above, we compile all of it together by concatenation into one dataframe. This dataframe becomes the basis of our map, which we build using folium. The benefit of cleaning the previous individual dataframes is that this concatenated dataframe is highly concentrated and effective in nature.

Results

We get our result in the form of a clustered map that easily pinpoints the spots in the city of New Delhi which are accessible, safe and accommodating for the growth of artists in the city.

THE FINAL RESULT