Data Science Specialization IBM & Coursera

Final Report

On

Applied Data Science Capstone Project

Finding the best region in Kathmandu for tourist to be around for best access to various services

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1. Introduction

1.1. Problem Background

The city of Kathmandu is the capital city of Nepal. It is diverse and is financial capital of Nepal. It provides a lot of business opportunities and business friendly environment. It is considered as the center for opportunities. Every year many people around country comes to this city for different opportunities and entertainment. The city is a major center for marketing, banking, finance, world trade, transportation, etc. Also, this city is the only one with an international airport in the country. So, we can say that this is first place for tourist they put their foot on. Hence it would be great to find the best place for tourist to live around so that they are in closest proximity to various services.

1.2. Problem Description

Tourism is the business that significantly impacts on this country's economy. Hence it is utmost important to analyze the best available services for the tourists so that they feel comfortable during their stay without any hassle. The place has multicultural people belonging from unique ethnicity, languages, etc.

Many tourists come here and if not getting any help form guides will definitely find it difficult finding the best region to live around because no proper localization labels is available here.

Hence, the success of this analytical project would be to find the best region in Kathmandu for tourist to live around.

2. Data

The city which will be analyzed is the capital city of Nepal: Kathmandu.

For analysis we will be using the data from foursquare to get information about different spots around Kathmandu like temples, restaurants, shopping malls, transportation, café, hotels, etc.

2.1. Data 1 : Hotel This data contains all the hotels fetched from foursquare database in Kathmandu.

	name	categories	address	lat	Ing	state
0	Hotel Yak & Yeti	Hotel	Lalupate Marg	27.711581	85.320274	Central Region
1	Hotel Shanker	Hotel	Lazimpat	27.718956	85.320082	Central Region
2	Royal Singhi Hotel	Hotel	Lal Durbar	27.710940	85.319466	Central Region
3	De L'Annapurna Hotel	Hotel	Durbar Marg	27.711117	85.316408	Central Region

2.2. Data 2 : Temple

This data contains all the temples fetched from foursquare database in Kathmandu.

	name	categories	address	lat	Ing	state
0	Kantipur Temple House	Temple	Chusyabahal	27.711235	85.312934	Central Region
1	Hiranya Varna Mahavihar (Golden Temple)	Buddhist Temple	Kwabahal	27.675248	85.324419	Central Region
6	Pashupatinath Temple	Temple	Pashupatinath Rd.	27.709101	85.348620	Central Region
8	Taleju Temple	Temple	Makhan Tole	27.712171	85.311342	Central Region
16	Pachali Bhairav Temple	Temple	Sanepa	27.703415	85.304869	Central Region

2.3. Data 3 : Cafe

This data contains all the cafe fetched from foursquare database in Kathmandu.

	name	categories	address	lat	Ing	state
0	Revolution Cafe	Coffee Shop	Amrit Marg	27.715046	85.3 <mark>1</mark> 2490	Central Region
1	The Northfield Cafe and Jesse James Bar	Café	Thamel	27.715555	85.310185	Central Region
3	Espression: The Cafe	Café	Naxal	27.715180	85.326025	Central Region
4	Road House Cafe	Café	Bhat Bhateni	27.720106	85.331453	Central Region
5	Cafe Mondo Bizarro	Restaurant	Freak Street	27.703222	85.307922	Central Region

2.4. Data 4 : Restaurants

This data contains all the restaurants fetched from foursquare database in Kathmandu.

state	Ing	lat	address	categories	name	
Central Region	85.311125	27.712109	Thamel	Asian Restaurant	Yak Restaurant Bar & Lodge	0
Central Region	85.3 <mark>1</mark> 0147	27.714634	Chakshibari Marg	Thai Restaurant	Yin Yang Restaurant	1
Central Region	85.3 <mark>1</mark> 1328	27.711672	132, Kwobahal,Thamel	Restaurant	Pilgrims 24 Restaurant & Bar (Formerly feed	3
Central Region	85.310970	27.713442	Thamel-29, Narsing chowck	Asian Restaurant	Nomad's Restaurant and Bar	4
Central Region	85.319937	27.710031	Kashtamandap Rd.	Restaurant	Dallé Restaurant	5

2.5. Data 5 : Shopping Malls

This data contains all the shopping malls fetched from foursquare database in Kathmandu which contains multiplexes, shops, etc.

	name	categories	address	lat	Ing	state
0	Bluebird Mall	Department Store	Tripureshwor	27.691672	85.317112	Central Region
5	Kathmandu Mall	Shopping Mall	Kathmandu	27.701529	85,313348	Central Region
6	Sherpa Mall Coffee Express	Coffee Shop	Du <mark>r</mark> bar Marg	27.710735	85.317734	Central Region
7	Sherpa Mall	Shopping Mall	DURBAR MARG, KATHMANDU, NEPAL Kathmandu,	27.710692	85.317591	nepal
11	Civil Mall	Shopping Mall	Sundhara	27.699399	85.312736	Central Region

The reason behind using these data is the fact that the visiting places are very far from each other and the visits are very tiresome, hence best place to live by defines that you don't have to hassle around to have some cozy and enjoyment time after the visit.

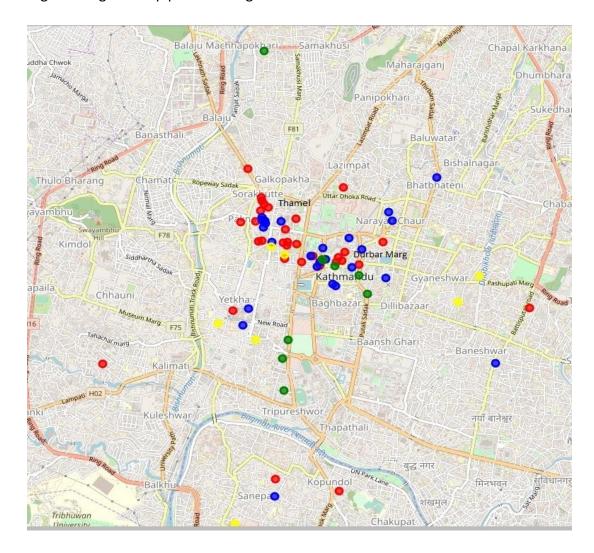
3. Methodology

3.1. Business Understanding

Our main goal is to get the best region in Kathmandu for the tourist to live around so that they are in close proximity to various services.

3.2. Analytic Approach

Kathmandu city is surrounded by a huge number of services but not in all the places. Hence we are going to analyze the data from foursquare and find the best region using the map plotted using these data.



4. Results

From the above map plot, what I have analyzed is that most of the major spots from the data set lies in two particular regions i.e. Thamel and Durbar Marg. Major spots have been clustered around these regions. Also, upon investigation from google I have found that also other facilities lie in this region making these regions being the center for different kinds of services.

5. Discussion and Conclusion

This suggest that the country has the scope for increase in incoming tourists in Nepal if in someway the information of this sort is brought to the knowledge of tourists for their ease travel.

Also, from this it can be seen that not all places are densely populated with these sorts of services which makes these places very crowdy and many tourists like cozy and outside the crowd kind of places. Hence it would be great to have these services available in other regions too.