# Understanding Tourism in India

Nithiya Nanmaran

#### Introduction

Tourism in India is important for the country's economy and is growing rapidly. The Ministry of Tourism designs national policies for the development and promotion of tourism. The Ministry consults and collaborates with other stakeholders in the sector including various central ministries/agencies, state governments, union territories and private sector representatives. Concerted efforts are being made to promote niche tourism products such as rural, cruise, medical and ecotourism. The Ministry of Tourism maintains the Incredible India campaign focused on promoting the tourism in India.

#### Business Problem

One of the importance of tourism is the employment opportunity which it offers to the people of that country. The purpose of this project is to analyze the tourist places of a given state in India and try to recommend the best location where they can open a restaurant or lodging to make the best use of the opportunity.

This project helps the people who are interested in opening a restaurant, lodging, transport services.

#### Data Source

Districts in India Wikipedia

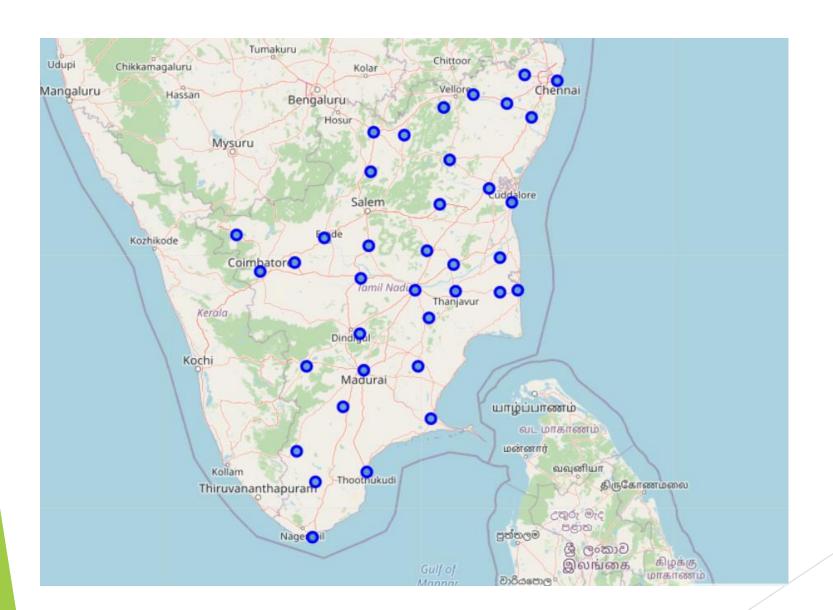
page: <a href="https://en.wikipedia.org/wiki/List of districts in India">https://en.wikipedia.org/wiki/List of districts in India</a> is the major source of data that is being used to obtain all the districts of India.

Here, we are considering one of the states of India, **Tamil Nadu**. The beautiful soup 4 package, to scrape information from the web pages and convert it into a pandas data frame.

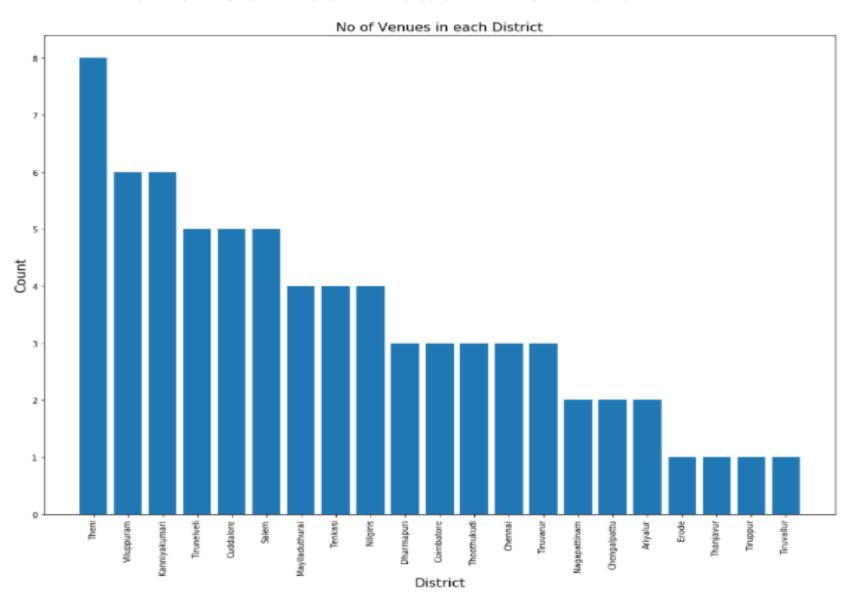
Using Python geopy package, get latitude and longitude for all the districts.

Foursquare API is used to understand the neighborhoods in the districts to give clear idea to the stakeholders.

## Districts in Tamil Nadu



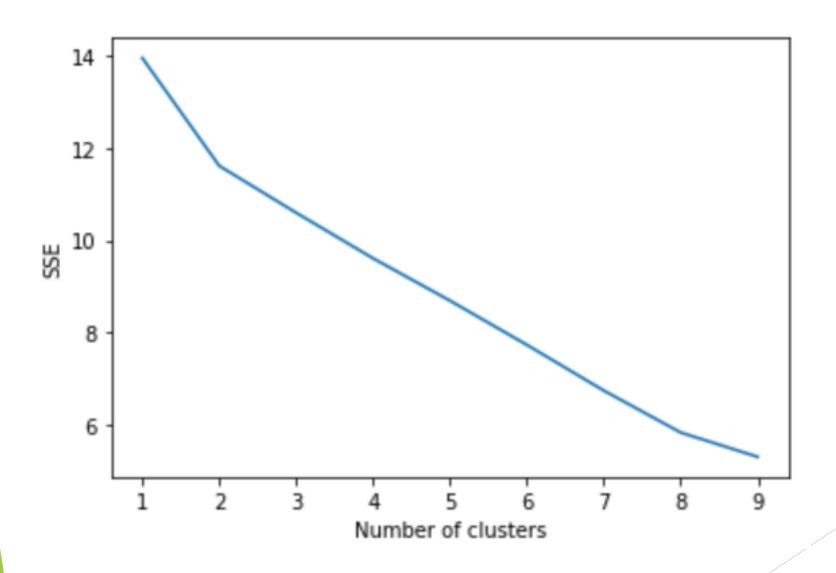
## Number of Venues in each Districts



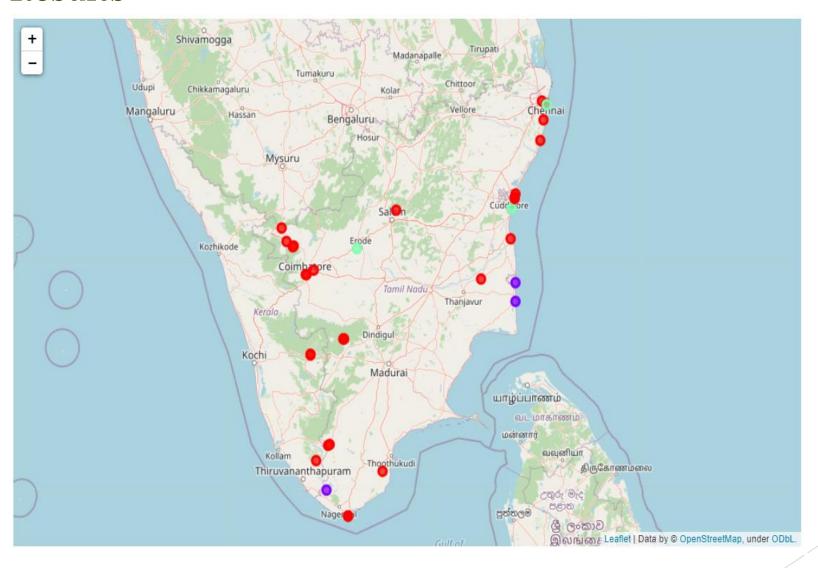
# Steps followed

- One hot encoding to obtain famous businesses near Tourist spots in each district.
- From the venues details, business opportunity can be determined.
- Using k-means algorithm to cluster the business details.

## Elbow method to find value of k



## Results



### Discussion

- From the results, the most common business in cluster one is Food business. There are many Indian and Vegetarian cuisine restaurants, opening up other cuisines attract people.
- In cluster two, the most sought business is the Hotel. Opening up lodging service could be best option.
- Finally, in cluster three, Cafes are in business.

# Conclusion and Scope of Development

With the given information of the tourist spots, finding best options for business help people who are willing to start the business.

Given more information of the tourist spots, we can tune the results to get accurate options.

Using k++, might help in better clusters.

# Reference

https://en.wikipedia.org/wiki/Tourism\_in\_India

https://en.wikipedia.org/wiki/List\_of\_districts\_in\_India