# Hotel Apartment in Kochi, Kerala

Analysis Report







**MAY 26** 

Coursera Capstone Project
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## Introduction

#### **BACKGROUND:**

Kochi is a beautiful city situated on the Western Coast of India facing the Arabian Sea, and rightfully called the 'Queen of the Arabian Sea'. It has a rich network of backwaters and is the culture and heritage center of Kerala. Cochin known as the Queen of Arabian Sea, is the Commercial Capital of Kerala.

An enormous potential exists in Kerala, especially in Cochin for the hospitality industry. There are several IT parks, industries, many export companies, 100% literacy, highly developed social structure, and well laid-out communication facilities and transport infrastructure. These and a few other factors provide enormous scope for the growth of hospitality industry in Cochin.

### **BUSINESS PROBLEM:**

My client wants to utilize the hospitality business potential of Kochi, and he is ready to open a hotel apartment in the region.

The objective of this project is to help the client in selecting a best location in Kochi to start his new hotel service apartment business. Choosing the right location is the key to the success of the business.

There are several factors needs to be considered for selecting the right location,

- 1. Accessibility, transportation facility etc
- 2. Density of other hotel and hotel apartments
- 3. Industries and commercial establishments around the region

This project will attempt to explore patterns of suburbs of Kochi by using data science methodology like categorizing them into clusters in order to determine the best location to open a hotel apartment.

## **Data**

Based on the above factors we need following data to solve the problem.

- Suburbs of Kochi. Source of data is https://en.wikipedia.org/wiki/Category:Suburbs of Kochi
- 2. Location data, this data will extracted from opensource.
- 3. Venue data –Venue queries will then be made by suburbs using FourSquare APIs. The resulting data regarding venue category will be used to observe commonality between subdistricts. We will use this data to perform clustering on the neighborhoods. K-means clustering algorithm will be used to find pattern between the suburbs.