Introduction

The situation of the current pandemic is becoming worse every day. Growing number of cases along with added ignorance by individuals is affecting the recovery rate. So, it has become important to understand the number of people around a place is either affected by COVID-19 or is suspected and thus quarantined. This helps people who want to go to a public place or a restaurant. Having data on how many are infected may help analyze the condition of the place. This project aims at one particular location for this - Bengaluru - a city in the southern part of India, in the state of Karnataka.

Anyone who would like to analyze the condition in the area can be interested in this project. It helps them to identify and decide if the place they are planning to visit is actually a good idea.

Data

1. Foursquare location data (to get location data
2. Zomato API (to get details of restaurants nearby)
3. Current COVID -19 dataset from the Karnataka Government website (to analyze current COVID-19 situation) – https://karunadu.karnataka.gov.in/hfw/kannada/homequarantivedocs/Bengaluru.xls

Methodology

1. 3 data frames are obtained from each of the 3 datasets mentioned above to get the local places.
2. Data is cleaned to
    - Convert into str
    - Remove extra columns in the data frame
    - Combine whole addresses
    - Round the latitude and longitude values up to 4
3. Pin code is obtained for the data from Zomato and foursquare so as to have a common point to merge data
4. Data from Zomato, foursquare and COVID are merged.
5. They are grouped to understand the number of suspected patients around the area with the respective pin code.

Results

The project showed us a merged version of how many cases are available near a restaurant which enables a person to decide if at all to go and have food in that particular restaurant. The decision is based on the number of cases at the pin code.

Discussion

1. It is observed that better user accessibility has higher rate of COVID cases
2. The community spread is lower than international travel spread