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IBM DATA SCIENCE CAPSTONE - BATTLE OF THE NEIGHBORHOODS

The Korean Barbecue Dilemma

WHAT ARE WE DOING HERE?

- I love Korean Barbecue (KBBQ) - It is especially delicious after a few beers
 - I have recently decided that I would like to open a KBBQ
 - I have two locations that I am considering - Newport Beach, CA and Irvine, CA



HOW ARE WE GOING TO DECIDE?

- The scope of this project is to make a decision on the two locals based on the two criteria:
 - Proximity to bars
 - I want to make sure that my restaurant is close to bars because I intend to market it as an after-hours eats
 - Lack of competition (distance from other KBBQ restaurants)
 - I also want to make sure I am not near an existing KBBQ restaurant to avoid unnecessary competition

HOW ARE WE GOING TO DO IT?

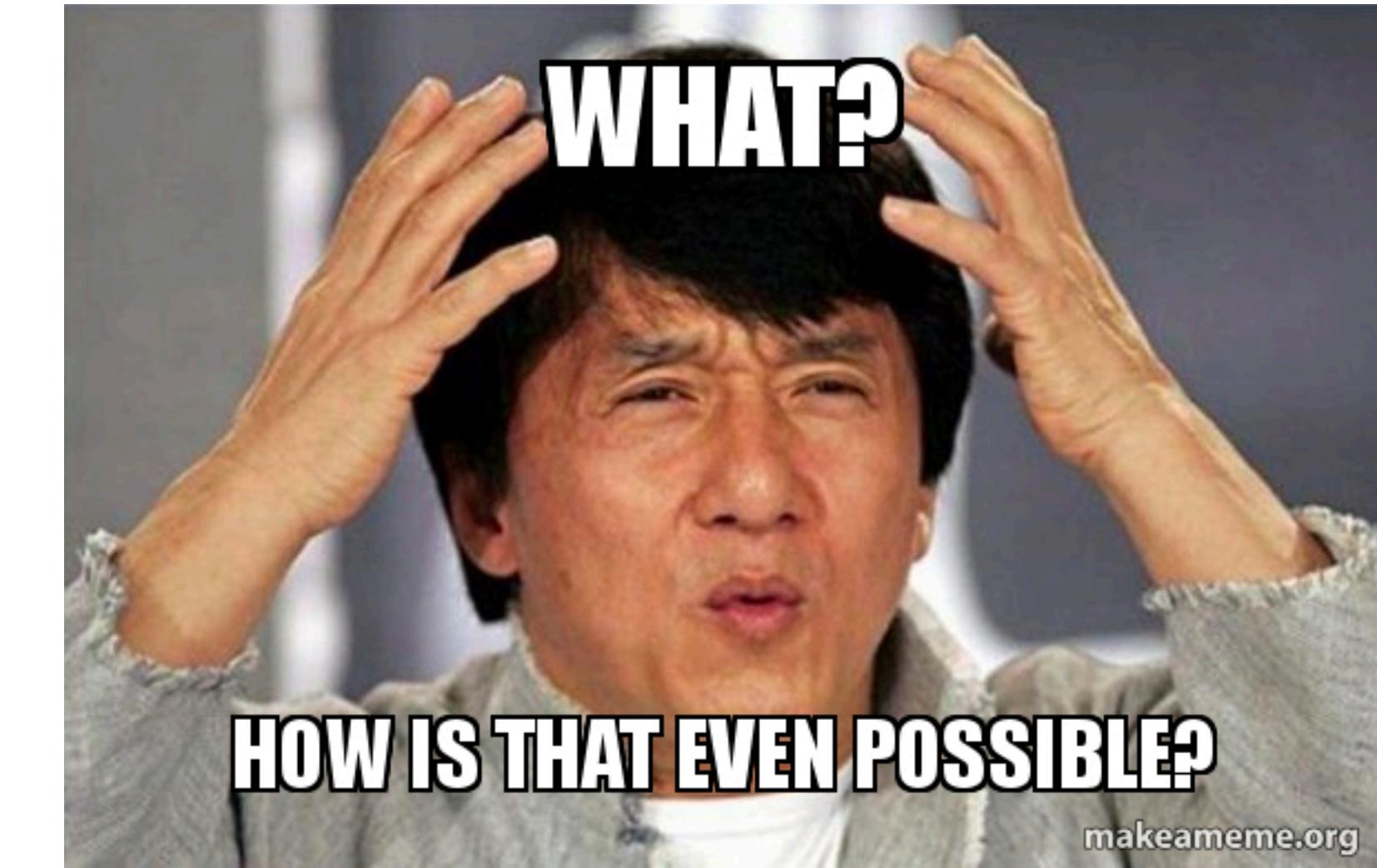
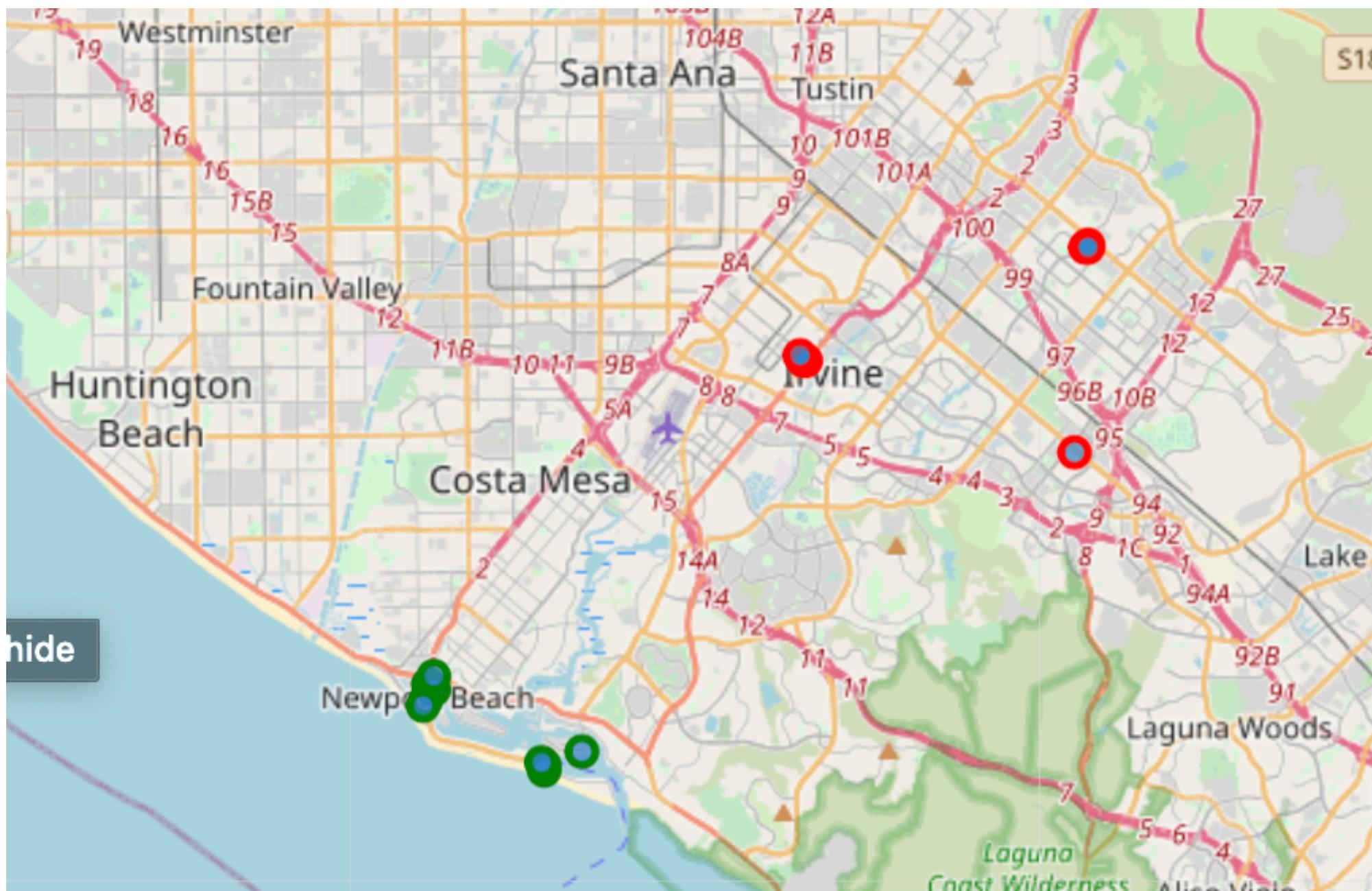
- We are going to use python to visualize both cities and make further comparisons as needed
 - Obtain Newport and Irvine Zip Codes
 - Obtain Latitude & Longitude for those Zip Codes
 - Use geo-data to extract restaurant and bar data from the Foursquare API
 - Map the restaurants and bars using the folium library
 - If necessary create clusters for the bars and KBBQ restaurants to find the optimal location (scored on proximity to one or more bars and distance from the nearest KBBQ)

WHAT HAPPENED WHEN WE DID IT? PT.1

- Zip Code data extracted from Ciclt and cleansed to include only Newport and Irvine
- Latitude and longitude data extracted from Opensoftdata and cleansed to include only the latitude and longitude for the Zip Codes in Newport and Irvine
- Latitude and longitude data used to make a call to the Foursquare API
- Venue data acquired from Foursquare
- Dataframes for Newport Bars, Irvine Bars, Newport KBBQs, and Irvine KBBQs created

WHAT HAPPENED WHEN WE DID IT? PT.2

- There were two interesting discoveries
 - Newport has zero KBBQ Restaurants (shown in red) according to Foursquare
 - Irvine has zero bars (shown in green) according to Foursquare



WHAT'S THE DECISION?

- Due to the lack of competition and proximity to bars the ultimate decision is to build on the Newport peninsula
- Further analysis was not required to score the locations due to the total lack of competition in Newport and the total lack of bars in Irvine

