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#### **#Context**

As Californians, there is no shortage of appealing destinations within our home state when it comes time to take a vacation. One big question that comes along with the decision of where to go is "Where should I stay?" As well as "How much will it cost?"

In this exercise, we examined hotels data across California's biggest cities based on price, guest rating and local info. We brought this data to life with interactive visualizations that will help plan our next close-to-home vacation.

## **Exploring the Travel APIs**







### **Initial Hurdle**



**Lesson learned**: Double check the API limit.

#### **Data Preparation**

Extract Transform Load



First API call: Hotels List by Cities

Second API call: Avg Price & Guest Rating Data preprocessing: 30 cities 297 hotels

173 hotels contain price info

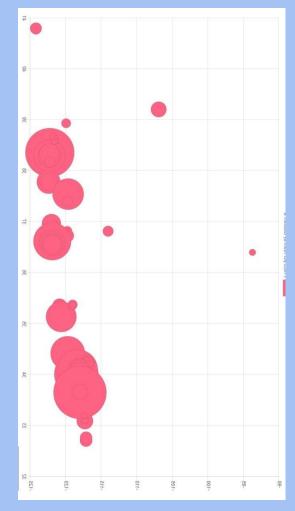
168 hotels contain price & rating

'data/hotel.csv',
'data/airport.csv',
'data/hotel\_price.csv',
'data/hotel\_final.json'

# Let's take a look !!

# Coincidence? I think not!

Notice how the bubbles look like the California coast line, and the larger bubbles align with the state's bigger cities.





### **Concluding Thoughts**

- Null hypothesis: Hotels in California are uniform across some aspects (price, rating, number of hotels in each city)
  - Based on our data exploration and visualizations, we can conclude that no! not all Californian hotels are created equal and vary greatly in terms of pricing, guest rating, and quantity in various cities
  - The majority of hotels, as well as the highest prices, were found in geographically larger and more populous cities (e.g. San Francisco, Los Angeles, San Diego)
  - We have successfully proven our null hypothesis wrong
- Check the rate limit for the API you wish to utilize (the biggest hurdle we came across)
- Visit California:)

