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Project 2 Outline:

Eating in San Francisco

Purpose:

We were inspired to pursue this topic because we realized that accessibility is an issue for many people, and those who are in wheelchairs are likely to be the most heavily impacted. When you compound that with idea that they might need comfort dogs, which do not count as service dogs under the ADA, their options for dining locations become even more limited. We wanted to find out which restaurants are the most accessible for this group of people.

Methodology:

* 1. Gathering data:
     1. Michael: Sources we used
        1. Yelp API
        2. Web Scraping
        3. Manual entry
     2. Derrick: How data was gathered
        1. Python API call
        2. Beautiful Soup
        3. Old fashioned manual entry
     3. Carolyn: Data transformation
        1. Go through data and drop unnecessary info
        2. Get zip codes into neighborhoods
        3. Comparing data – lat and long were not the same
  2. Data visualization:
     1. Word Cloud:
        1. Carolyn: Dog Friendly Restaurants
           1. We used AnyChart (new library)
           2. Which neighborhood has more, heat map explanation
        2. Derrick: Wheelchair Restaurants
           1. Which neighborhoods have more
           2. Briefly talk about why we think this is: housing? Flat ground?
        3. Michael: Both Dog Friendly and Wheelchair Accessible Restaurants
           1. Which neighborhoods have more
           2. Why we think that is/is SF really more accessible
     2. Leaflet Map:
        1. Derrick: Transition to talk about map of restaurant
           1. Talk about where we can see clustering
           2. Tie back to word cloud we saw earlier
           3. More housing information
        2. Michael: Coding part
           1. What we based it off of: bike exercise
           2. Explain interactivity of the map
           3. Issues faced – referencing the correct d3 json file
        3. Carolyn: Other issues faced
           1. Issue with linking leaflet code with Flask
           2. How issue was resolved
           3. Talk about how pathway of scripts needed to be in correct place/correctly called for anything to be rendered with Flask
     3. Plotly Graph:
        1. Carolyn: Transition to show plotly graph
           1. What is being measured (x and y axis)
        2. Michael: Data analysis
           1. Which neighborhood has higher frequency (by color)
        3. Derrick: Coding part
           1. Initially wanted to use a new library but issues with functions not working (don’t go into detail yet, talk about implications at end)

Results:

From the data set, we found that the neighborhood with the greatest amount of dog friendly (only) restaurants was in the Inner Mission/Bernal Heights, the neighborhood with the greatest amount of wheelchair-accessible restaurants was in SOMA, and neighborhood with the greatest amount of restaurants that are both dog friendly AND wheelchair-accessible was, again, the Inner Mission/Bernal Heights.

Implications:

Our data tell a story that is influenced both by geography, history, and politics. The neighborhoods that had the greatest amount of both wheelchair accessibility and dog friendliness are flat, close to sea level, and relatively newer neighborhoods. Other contributing factors to these results that we can consider are that Historically Significant buildings, such as old Victorian Houses, do not need to be ADA-compliant.

Issues we ran into:

* PostgreSQL was too clunky to use, so we had to use SQLite for deployment.
* Heroku would not function properly, so the site was deployed with flask.
* Our map displays the restaurants that are BOTH dog friendly and wheelchair accessible. We had some issues reading the GeoJSON into leaflet at first, but were finally able to figure it out.

Conclusion:

Restaurant Accessibility is a huge issue for disabled people and those who, for whatever reason, need comfort dogs. This is much is clear, even in the most progressive city in the country. From the data, we gather that much can be done to make restaurant accessibility more widely available to different kinds of people. We posit that it behooves the City of San Francisco to make restaurant accessibility a greater priority, and that city council should put pressure on restaurants toward this end.