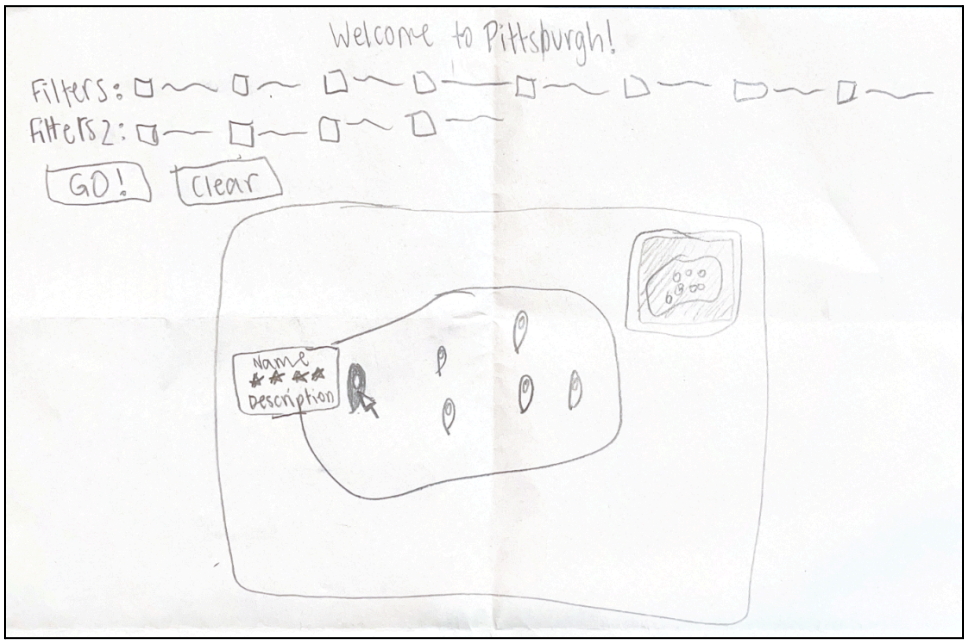
Interactive Yelp Dashboard: Restaurants of Pittsburgh

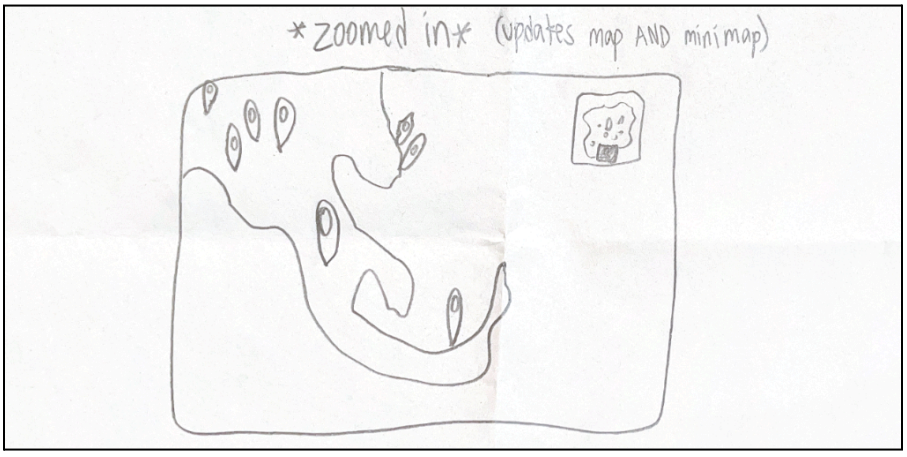
About the Dataset

Data chosen was the Pittsburgh yelp csv. I additionally used a geo json of Pittsburgh to create the map. My intended user base is people new to the area, so that they can explore restaurants while getting a better feel for the location of various areas, as well as neighborhoods that they can choose to see in depth.

This leads to various intuitive exploration needs for my audience, such as filtering by location (certain neighborhoods/areas), filtering by food type (ethnicity/shop type), the ability to zoom in and interact with the map (to provide more detailed location information, etc.).

Development Process





The use of a zoom/pan/dragging map was imperative to this design. Users would need to be able to get a better sense of location, as well as see a finer or coarser grain of icons on the screen depending on their needs. To ensure user understanding of where they were while zoomed in/moving around, the mini map would also change to reflect the view box currently on screen.

In addition, the ability to filter by various metrics would be necessary to sift through the overwhelming amount of initial data. This can be done with multiple filters, or reset using the "clear" button. To get a better idea of a given restaurant, users can hover over an icon to get details through a tooltip textbox.

Though quite similar to the final design, the storyboard iterations do differ in some areas. The amount of filters was much greater than anticipated, and I thus chose a sidebar technique rather than a header for the buttons. I had also considered the ability to click on an icon to permanently show its details on a sidebar (essentially, a restaurant viewing history), but given the time constraints, this being an individual project, and even the amount of space it might take on the screen led me to forgo the idea. The tradeoff with this is less information given to the user, however it is also true that too much information may have crowded or overwhelmed user experience and viewership.

Final Visualization

NOTE: Please zoom out to roughly 80% for the best experience!
(CTRL + Minus (-) on windows) (Option-Command-Minus (-) on mac according to google)

Screenshot of default settings with mouse hovering over specific icon to get tooltip details (name, category, rating). Users can pan, zoom, and drag the map or mini map to change the focus of the map. Users can filter using various metrics on the side bar, or clear past filters.

There are certain tradeoffs. For instance, the use of red icons to represent restaurant locations, though it is fun and stylish, can be overwhelming. This could have been avoided by the use of dots

instead. Or, rather than making all icons the same fork/spoon symbol, they could have different images/colors based on category, such as restaurant vs. cafe vs. market. This would make the user experience of distinguishing categories perhaps easier.

Another tradeoff is the fact that filters must be checked, and then the “Filter!” button must be clicked in order to see the results. This can be tedious and redundant for users, and it lacks proper responsive design. The timeliness of seeing filter results is currently dependent on the user clicking an additional separate button. This could have been avoided by allowing live updated results based on individual checkbox clicks.

Additionally, the spread of restaurants beyond the Pittsburgh border has its pros and cons. On one hand, users will be able to see more data that may apply to them. On the other hand, it does crowd the map and surrounding areas, and their lack of map background gives no real/helpful indication of their location. This could be avoided by cleaning up the data to only populate points that lie within the map.

Work Breakdown

Individual project. Most time was spent on perfecting the map features, especially the mini map, zoom functions, and brush functions. Getting the tooltip to appear correctly regardless of zoom also took quite a bit.