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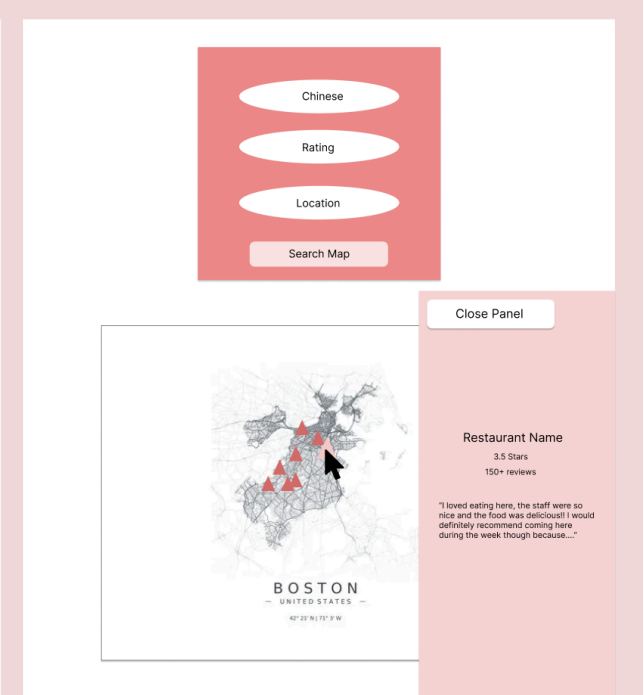
Homework 3 - Find a Date Spot in Boston

Project Introduction:

For our project, we chose to make use of the Boston Yelp review data to create a visualization that helps users choose the best restaurant for a first date in the city! If you're hoping to get a second date, it's important that the first one goes well, and the perfect restaurant can go a long way toward making that happen. Key considerations users have when choosing the best restaurant include its location (for planning purposes), the quality of the food, the type of food served, and whether the restaurant is newly established or tried and true. In building our visualization, we decided to include restaurant locations, rankings, cuisines, and the number of reviews so that our users can see all the relevant information at a glance. Not every user has stringent preferences for every category when picking a restaurant, but most users have at least one key criterion. For this reason, we included all the categories as dynamic filtering options to help users narrow down their choices. To accomplish this, we combined the Boston Yelp review data with an open-source [Boston JSON dataset] to produce a city outline that adds context to the location of each restaurant.

Design Planning:

{user clicks cuisine} {user selects cuisine from menu} {user submits filter search}



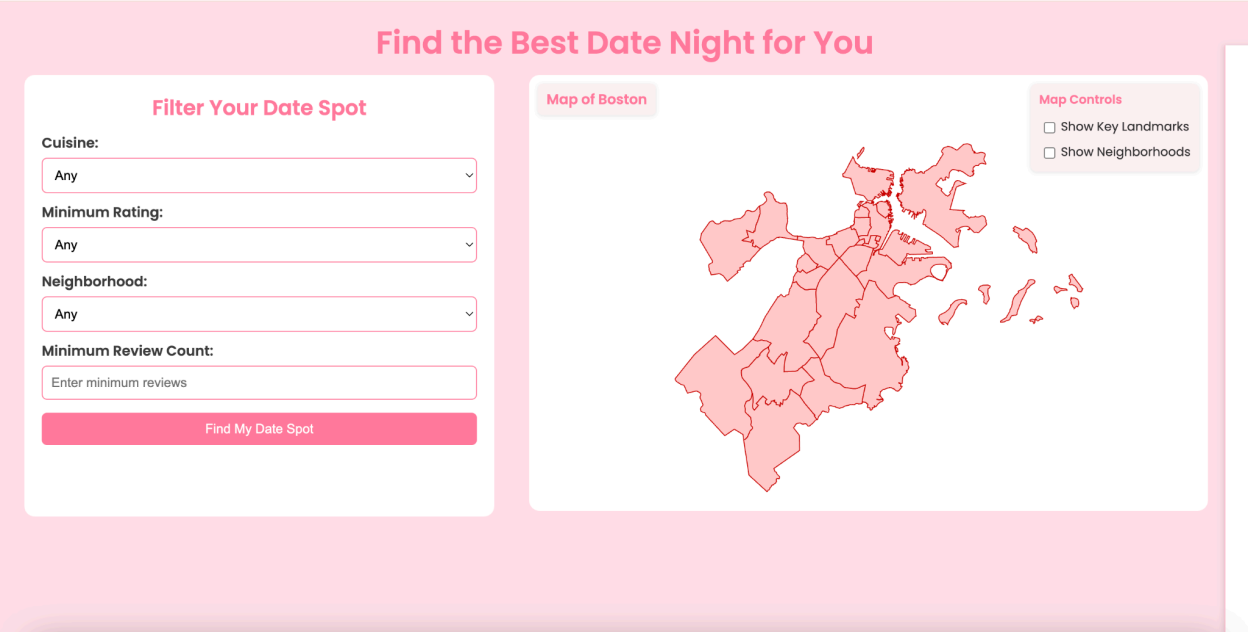
{user hovers over a specific restaurant}

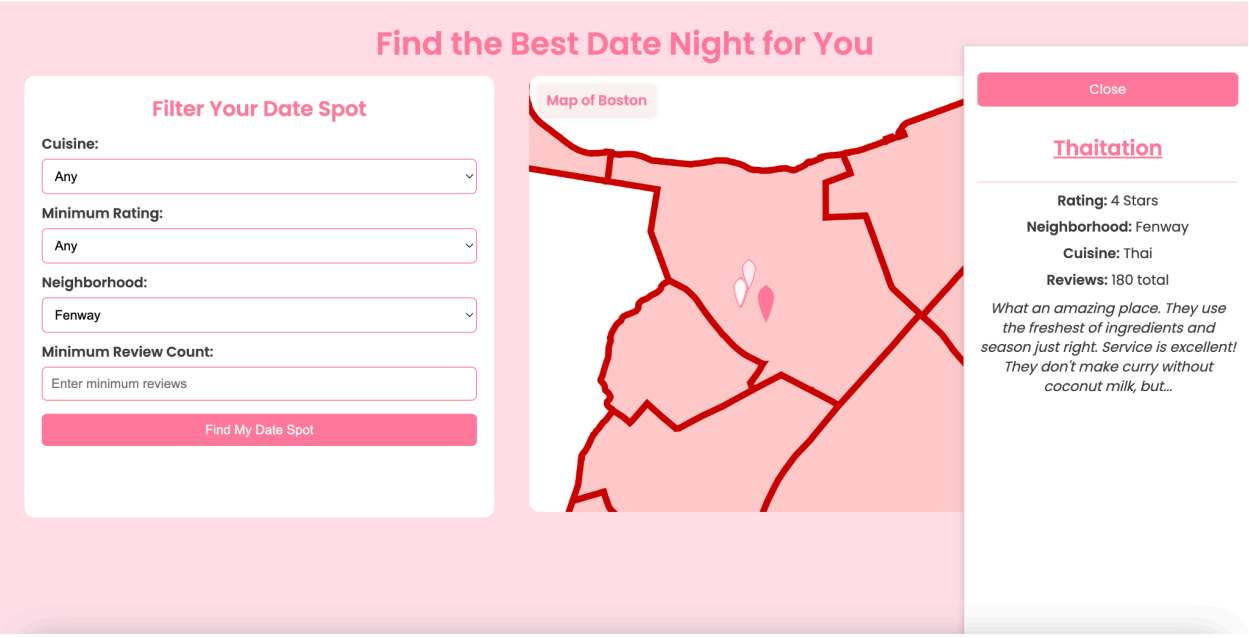
{User clicks on pin and sees details}

Since the dataset contains restaurant names, locations, reviews, ratings, and cuisine types, we decided it would be best to create a map-like feature where users can dynamically filter through restaurants based on their interests. When people are choosing the perfect restaurant for a first date, they want to consider both the restaurant's location and the type and quality of food offered. By integrating dynamic queries into our visualization, users can not only observe the distribution of restaurants across Boston but also see the distribution of their favorite choices. This interactive approach engages users in the search process and offers more flexibility than simply googling "Italian restaurants near me." We wanted our users to feel as though they were using an interface dedicated solely to assisting them in their search. For this reason, we styled the site with a theme of romance and maintained standard design principles to ensure users can intuitively navigate the visualization. For example, we used drop-down menus for filtering to reduce the cognitive load required to choose options, and we placed the filters next to the map to mimic the layout of common navigation interfaces and allow them to switch between the filters and the map-view easily. Each restaurant is marked on the map with a drop pin which is a familiar symbol for pinpointing specific locations. Additionally, to help users track which restaurants they click on, we implemented a hover feature that highlights the selected restaurant and displays its name. For ease of use, we also built a pop-out side panel that appears when a user clicks on a specific restaurant. This panel provides more details about the establishment, including a link to its Yelp page and a glimpse of customer reviews. We also wanted our users to instantly orient themselves within Boston, so we included map control options that let users toggle neighborhood and landmark displays. Rather than showing nameless spots on the map, our visualization immediately contextualizes each restaurant's location and provides an option to see additional details via the Yelp link.

Final Interaction Description:

Link to project





The final visualization consists of a large interactive menu with drop-down selections for cuisine, minimum rating, neighborhood, and minimum review count, along with a toggle map control option. The main display is an interactive map focused on the central Boston area. Users can apply filters using the menu, and the filtered options appear dynamically on the map. When users

click on individual pins, detailed information about the selected restaurant is displayed- including its rating, neighborhood, cuisine, review count, and a highlighted top review left by a customer.

Design Trade-Offs:

1. To create an effective map overview, we had to limit the detailed restaurant information shown on the map to only their absolute and relative locations. One possible solution to alleviate this limitation is to design different visual styles for the pins, such as adding country flags to denote different cuisines or applying varied colors to indicate different rating levels.
2. While we wanted to include a hover feature that allows a more detailed glimpse into the restaurant details, we decided ultimately this would create too much crowdedness in the map. Instead, we limited the hover feature to only include the restaurant's name.

Briefly outline the development process of your tool. Explain how your visualization/interactions changed between storyboarding and final implementation. Comment on any trade-offs or design choices you had to make while developing.Development Process:

We prioritized creating a clear, intuitive interaction process with our website. This involved focusing on details such as the shape and color of hover effects, the size and content of text displayed, and which pins were relevant to show versus those that were not. All of these elements were designed to feel natural, intuitive, and easy to follow.

One major design decision was to focus on the central Boston area rather than the larger Boston region. Some restaurants displayed on the map are located outside the central area (e.g., in Somerville, MA), but we decided to concentrate on the central area for two reasons: first, due to data limitations; and second, because it serves as a clear reminder that these spots are far from the defined center of Boston.

In our storyboards, we envisioned the interactivity on our map would be zooming in and out, and clicking to see details. When we were implementing the map, we realized that more user guidance on the map could be helpful to identify different neighborhoods in Boston and provide more context. Therefore, we added an option for users to see key landmarks / neighborhoods. They can choose to select or unselect them based on their needs.

Additionally, we originally planned to use a larger size Map svg but realized that a vertical set up would require users to scroll back and forth between the filters and the map. Instead, we placed the filters and the map side-by-side for easy user flow.

Work Breakdown:

Alsa: 10 hours, worked on display data on side panel, css styling of page, pins/hover/toggle map interactions, and the write up

Jillian: 10 hours, created github repo, created initial version with menu filtration options and map interactivity, styled page and layout, worked on write up

Katie: 10 hours, created pin shape, filtered data, worked on filter interactions, worked on write up