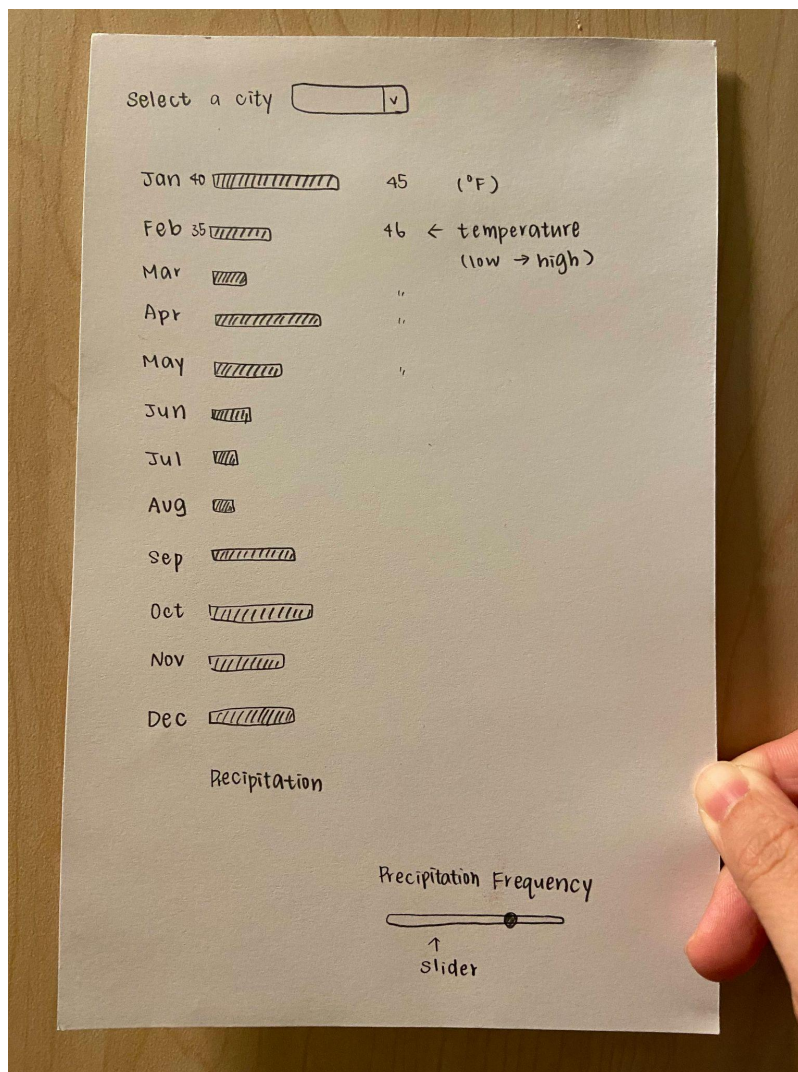


User Tasks

This application provides a visualization of Seattle's weather from July 2014 to June 2015. This could serve as a reference for users to do the prediction of the weather condition. It allows users to choose the month that they are interested in the weather conditions and they will see the average precipitation and lowest and highest temperatures for every single day of the month as default. This application is especially targeted at users who like to do outdoor activities or are interested in precipitation. Users can use the slider to get the days of the month when the precipitation is under certain inches of rain per hour that they are feeling comfortable doing outdoor activities. When users hover over the bar, they could see the actual precipitation and the actual mean temperature for that specific day.

Design Overview



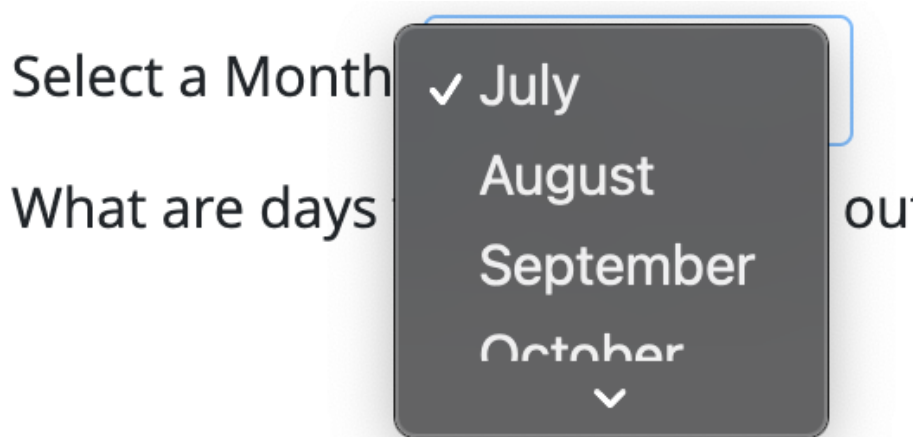
First Draft


For this design, I am trying to address tasks like a hiker wanting to know the weather conditions, especially the precipitation year-round to know when is the best time to hike, a person who likes outdoor activities and often participates in marathons or triathlons wanting to know when is most likely to rain so that they can better prepare for their training, and a US immigrant wanting to know the weather conditions for Seattle so that they know whether or not they might want to visit or move to. However, the design could not help with the tasks such as an environmentalist trying to find temperature trends over the past 10 years or a 9-5 worker who commutes to the office and wants to know what time of the day may be raining.

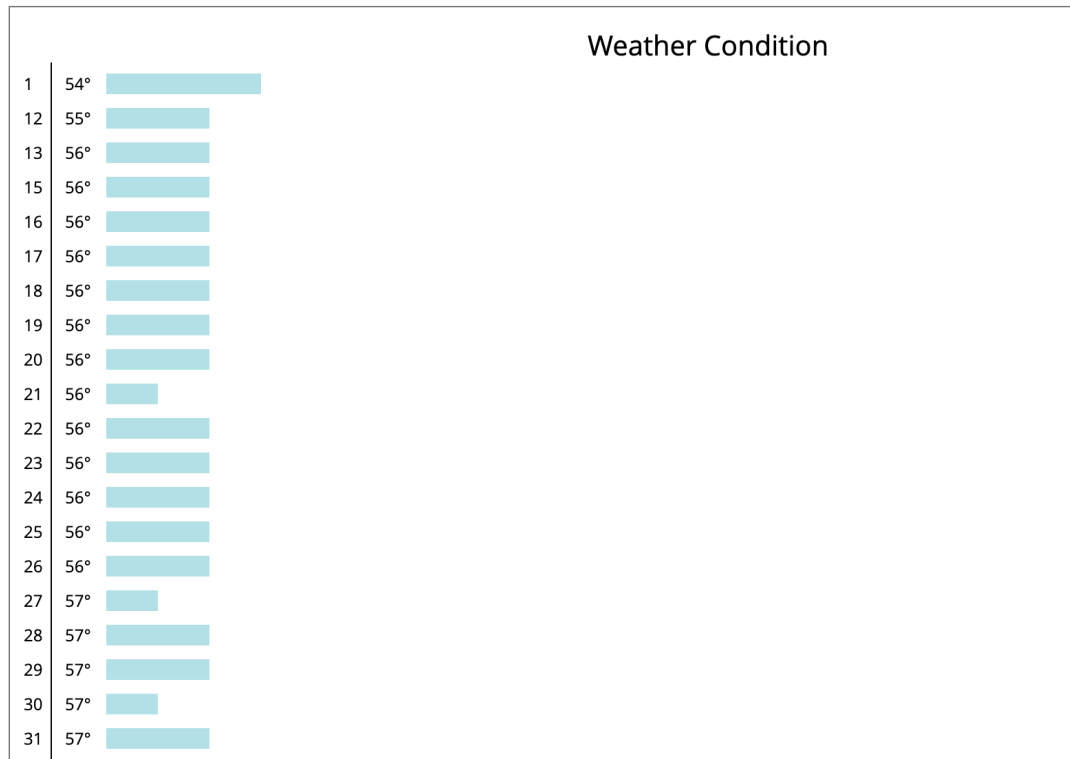
There is a drop-down menu on the bottom of the visualization to help users filter out the month that they are interested in about the weather. On the left side of the visualization, I lined up the days of the month sequentially so that it is easy for users to find the data they are looking for at a glance. The bars indicate the average precipitation of the day and the lowest temperature of the day was shown on the left side of the bars while the highest was on the right. I used the color blue for the bars because it is the color that people would usually connect to “rain”. I included a feature that could help users filter the days of certain average precipitation based on their settings. I got this inspiration from the letter frequency lab assignment. This is a multi-variate design because it contains information for precipitation, temperature, and month. It also allows users to change the settings so that the visualization displays the data for different months.

User Interface

- Allow users to choose the month that they are interested in



- Use the slider to see the days that have precipitation under 0.02708 inches of rain per hour
Filter out the days that the precipitation is under than  Max frequency value: 0.02708
- Output



- Note for users about the definition of light rain

Note: Precipitation less than 0.1 inches per hour is light rain

- When users hover over the bar, they get to see the actual precipitation and the actual mean temperature of the day

