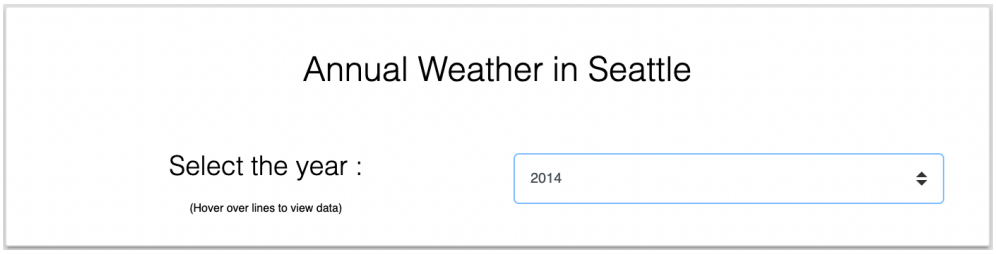
Final Deliverable Description

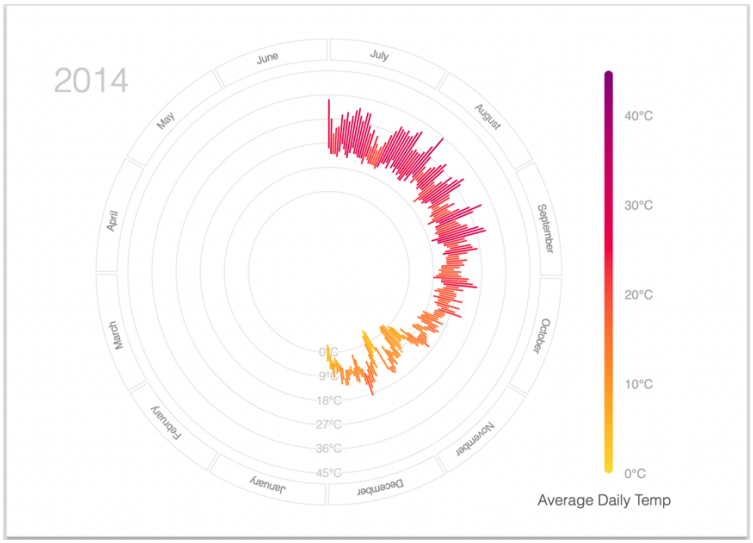
Design Overview

The purpose of this design is to take weather data and create a visualization that communicates objectives about the data differently than the original weather visualization chart. The data is a CSV file containing various weather data in Seattle from 2014-2015. From this file I only used the minimum, maximum, and mean temperatures for each day. The visualization I chose to present this data would be in the form of a weather radial. I really liked this design when I first saw it in class, and I think it is a great way to easily visualize weather trends throughout the year in a city. My design is very simplistic in nature. It contains an outer circle of all twelve months and inner circles which represent the temperature scale in Celsius. Additionally, A color scale is provided which highlights the temperature differences throughout the day and year. The user interface is also simple. A user has the option to select the year (only 2014-2015 are available) and can hover over each line to view the exact weather data.

User Interface:



Visualization:



This design is very versatile, it enables an effective representation of the data by being able to show much of it in one chart. For instance, the line height represents the range of temperatures throughout the day and is also very useful in highlighting irregular weather that occurs. Additionally, this chart enables the user to view the mean temperature of each day based on the color of each line. This is a useful feature as one could potentially see (with more data) how as the years pass, the trends in average temperature for each day of the month. It also simply allows the user to see the overall weather trends for each year as the months pass by.

In essence, the visualization enables a comprehension view of most of the important weather data and allows the user to see key patterns and irregular instances of weather for each day. This then can be compared for each year if that data is provided.

This design contains a few structural elements that are important to explain. Given that the CSV file did not contain data for January through June for 2014. I started the chart with July at the top. To properly read the chart, the user must start at the top and read down for the 2014 data. For the 2015 data, you must start at the bottom of the chart. Additionally, you can hover over each line to see the range and mean temperature for each day.

User Tasks

1. Discover trends to see if the max temperature is indeed increasing over the years in Seattle.
2. View irregular weather patterns throughout the year.
3. Find the highest and lowest temperatures for each month.
4. Overall weather trends.
5. Temperature ranges throughout the day.