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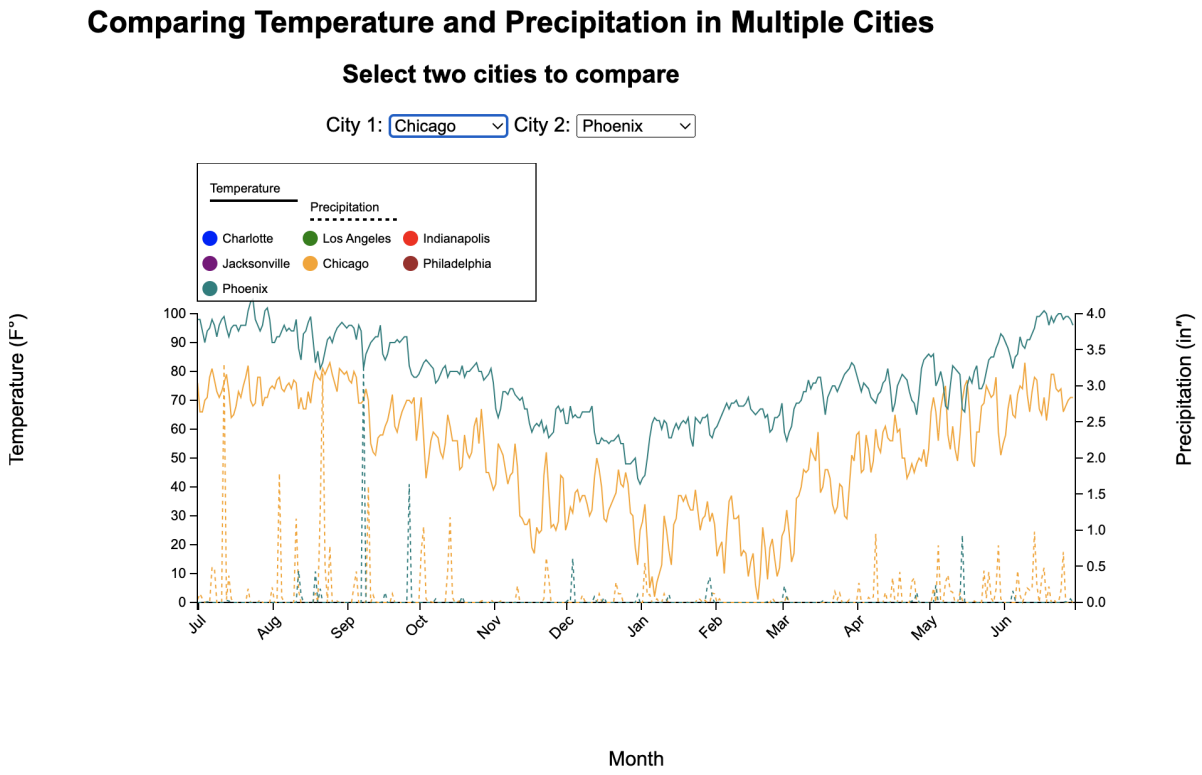
Info 474

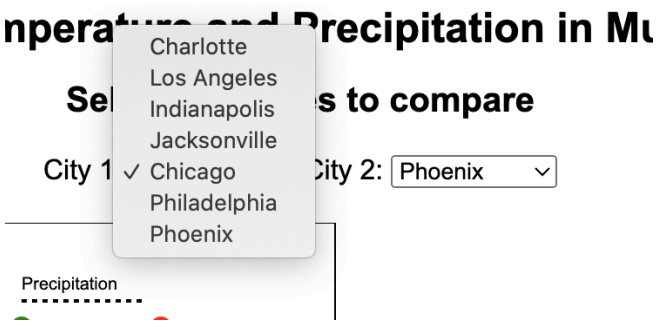
Final Deliverable: Weather Visualization

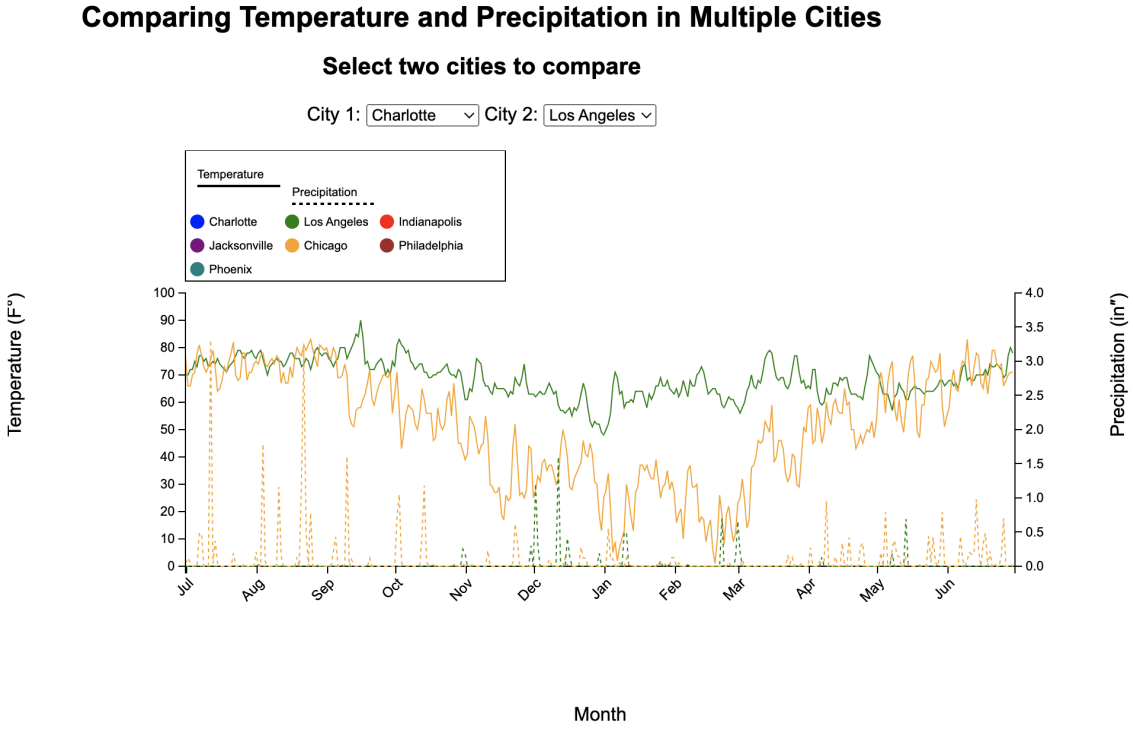


User Tasks

This visualization was designed with several different types of user tasks in mind. The main motivation behind designing this graph was for people who travel frequently and need to be able to compare weather trends in different cities. This will allow users to compare trends for different months in different cities and be able to, for example, pack different items of clothing or materials that they may need to support them in their travels. Overall, people who travel often may be curious about how the weather differs from their hometown and this graph allows users to quickly see the difference in temperature as well as precipitation levels for the different months of the year.

Additionally, because this graph includes precipitation information, it might also be useful for people who grow plants or farm locally to compare different precipitation levels in different cities across different times of the year. This would be most beneficial for farmers who are also relocating and wanting to plan out how they will grow different types of crops over the year in different cities. The precipitation data might be more relevant to this type of user.





Design Overview

This is a dual axis graph which has temperature represented on the left hand Y axis and precipitation represented on the right hand Y axis. These different axes have different scales which are labeled accordingly. The x-axis captures month data and has one tick for every month of the year. Users can select two cities to compare by hitting the drop-down menu. This navigation occurs through clicking the 'City 1' dropdown, selecting a city, and then moving over to 'City 2' and selecting from that drop-down menu to finally compare the different data points and trends.

Different cities are represented through colors and this is evident through the legend on the top of the graph. Each city has a distinct color which is shown with a circle that has the color of the city. Additionally the temperature in precipitation data is represented through either a straight line or a dashed line; the temperature is represented through a straight line, whereas the precipitation is represented through a

dotted line. The units for each of the axes are made clear through the axis titles (temperature is Fahrenheit, precipitation is in inches).

Finally, the actual data being represented is the actual mean temperature; this way users can understand the measured average temperature for that day. The precipitation data is the actual precipitation; so users can see the measured amount of rain or snow for that day.