Info 474 Final Deliverable
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# A Project to Inform Prospective NYC Tourists

The intention for this group of visualizations is to help guide and/or inform prospective New York City tourists. There are many tasks that it could support, and questions it could answer including (but not limited to):

- What is the best time to visit New York City based on the average temperatures during certain months of the year? (Tourist)
- What is the hottest it could possibly get during the time that a visit is planned to New York City? (Tourist)
- What is the coldest it could possibly get during the time that a visit is planned to New York City? (Tourist)
- What is the best time to visit New York City based on the average amounts of precipitation during each month of the year? (Tourist)
- What months must preparatory action be taken because of temperature? (Tourist)
- What months must preparatory action be taken because of precipitation? (Tourist)
- Are the average temperatures in New York City similar to the record temperatures? Possibly using this question to provide insight for climate change scientists. (Scientist)
- Considering the increasing tourism trends in New York City, would a trip to New York City be worth it? (Tourist)

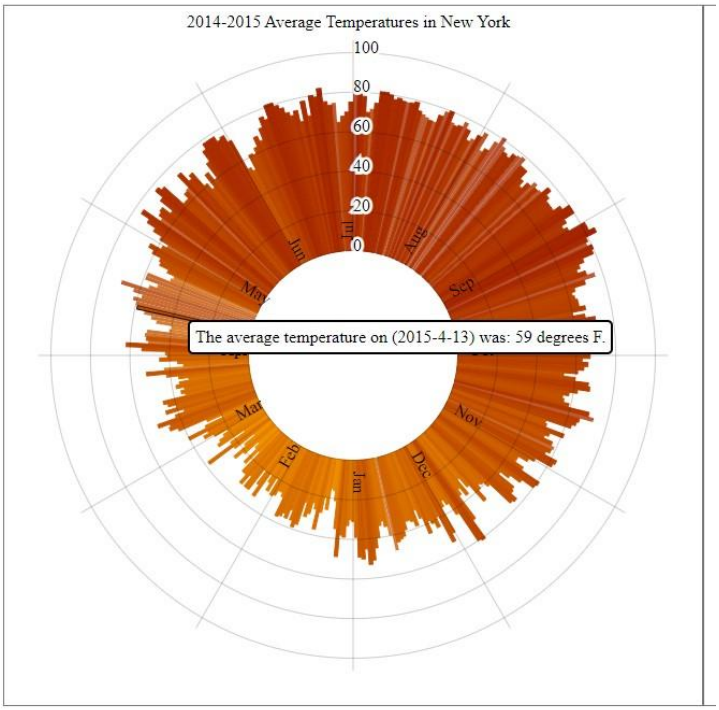
These are some of the user tasks that this visualization could support, and I personally would find this visualization especially useful in tourist scenarios, however, this visualization could very well also support a number of scientific scenarios. This visualization definitely has a specific user group, as people from or wanting to travel to Maine will not have much use for it, but for those interested in New York City, this visualization is rather useful.

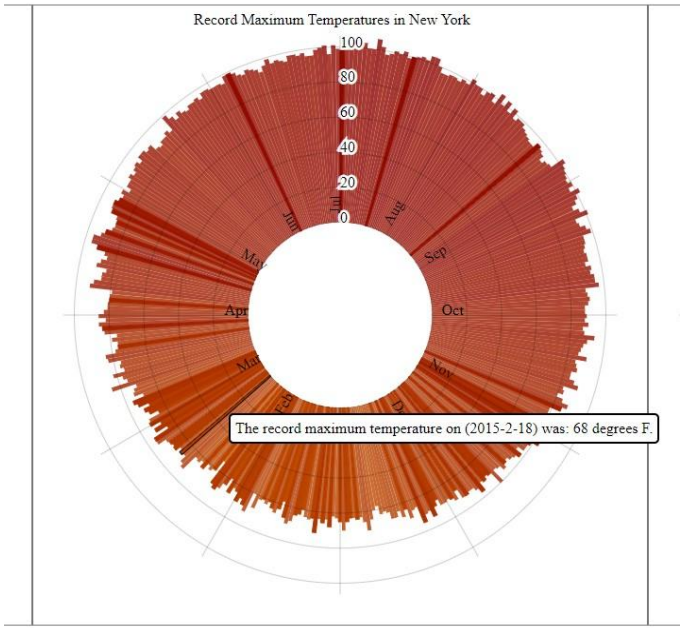
This design features three radial bar charts that show the average, record minimum, and record maximum temperatures in New York City for each day, with the average temperature data being from the years 2014-2015. As the temperature gets hotter, the bars get more and more red, and as the temperature gets lower, the bars turn yellow, and then eventually blue for extreme cold. The scale is in the top-middle of the radial bar chart, and it shows the temperature in degrees Fahrenheit. All of the axes have the same scaling for better comparison between the three graphs. The months are shown around the chart along the outward lines. You're able to view a tooltip with your mouse cursor which allows you to see individual dates.

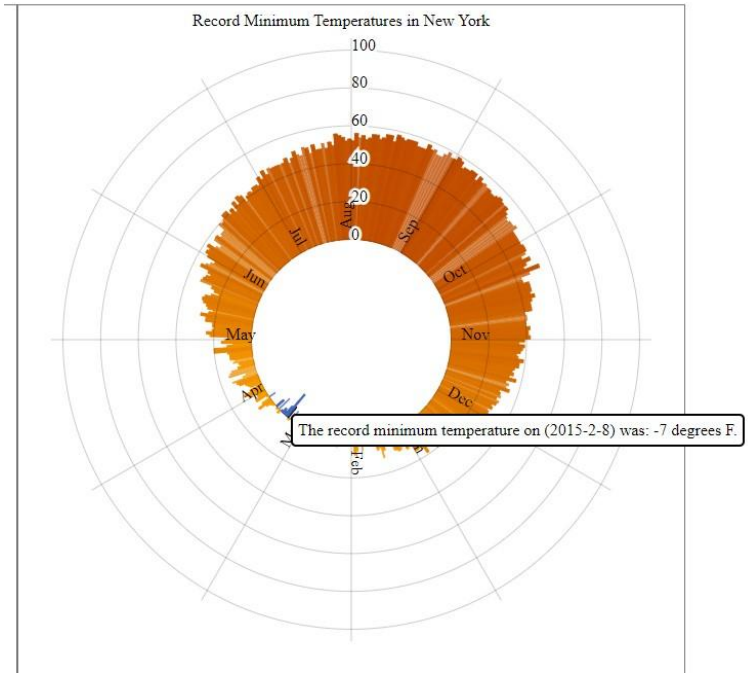
The bottom visualizations consist of a bubble plot showing the average amounts of precipitation for each month in the years 2014-2015 in inches. You are able to hover over each bubble to get the precipitation reading for the labeled month. The visualization on the right is a scatterplot showing the number of tourists per year (in millions) in New York City. You are also able to hover over each data point to show a tooltip with exact numbers for exact years. The larger the dot size in this visualization, the more tourist spending there was that year.

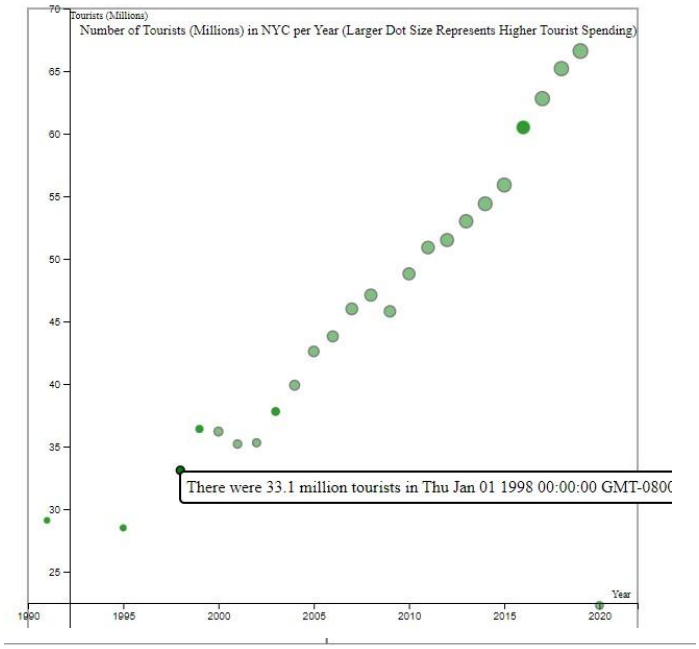
Although it may seem like there is a limited amount of interactivity, I think that it's perfect for what it's trying to show/accomplish. Furthermore, there aren't really any other interactive features to implement in this situation, and we are trying to compare and contrast different graphs next to each other.

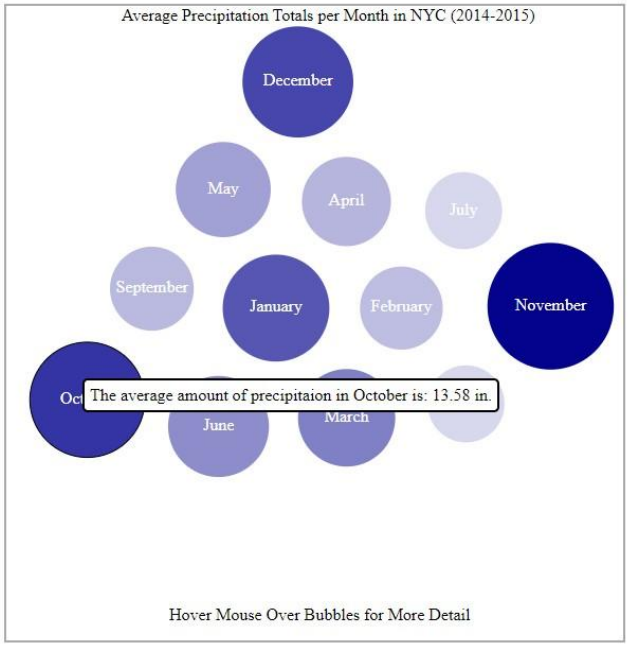
**Pictures:**

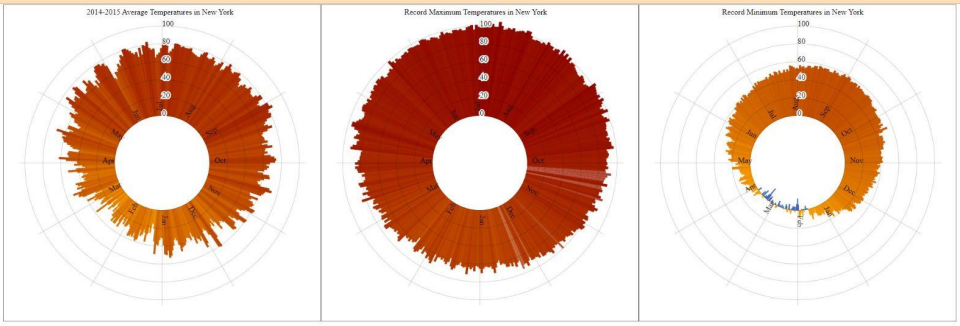


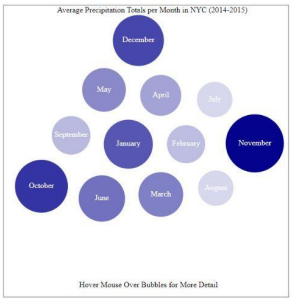

Record Maximum Temperatures in New York
100
80
60
40
20
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
The record maximum temperature on (2015-2-18) was: 68 degrees F.

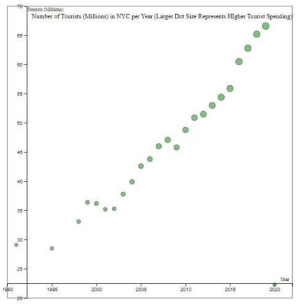

Record Minimum Temperatures in New York
100
80
60
40
20
0
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
The record minimum temperature on (2015-2-8) was: -7 degrees F.


Tourists (Millions)
Number of Tourists (Millions) in NYC per Year (Larger Dot Size Represents Higher Tourist Spending)
70
65
60
55
50
45
40
35
30
25
There were 33.1 million tourists in Thu Jan 01 1998 00:00:00 GMT-0800
Year
1990
1995
2000
2005
2010
2015
2020


Average Precipitation Totals per Month in NYC (2014-2015)
December
May
April
July
September
January
February
November
Oct
The average amount of precipitaion in October is: 13.58 in.
June
March
Hover Mouse Over Bubbles for More Detail


2014-2015 Average Temperatures in New York
Record Maximum Temperatures in New York
Record Minimum Temperatures in New York


Average Precipitation Totals per Month in NYC (2014-2015)
December
May
April
July
September
January
February
November
October
June
March
August
Hover Mouse Over Bubbles for More Detail


Number of Tourists (Millions) in NYC per Year (Larger Dot Size Represents Higher Tourist Spending)