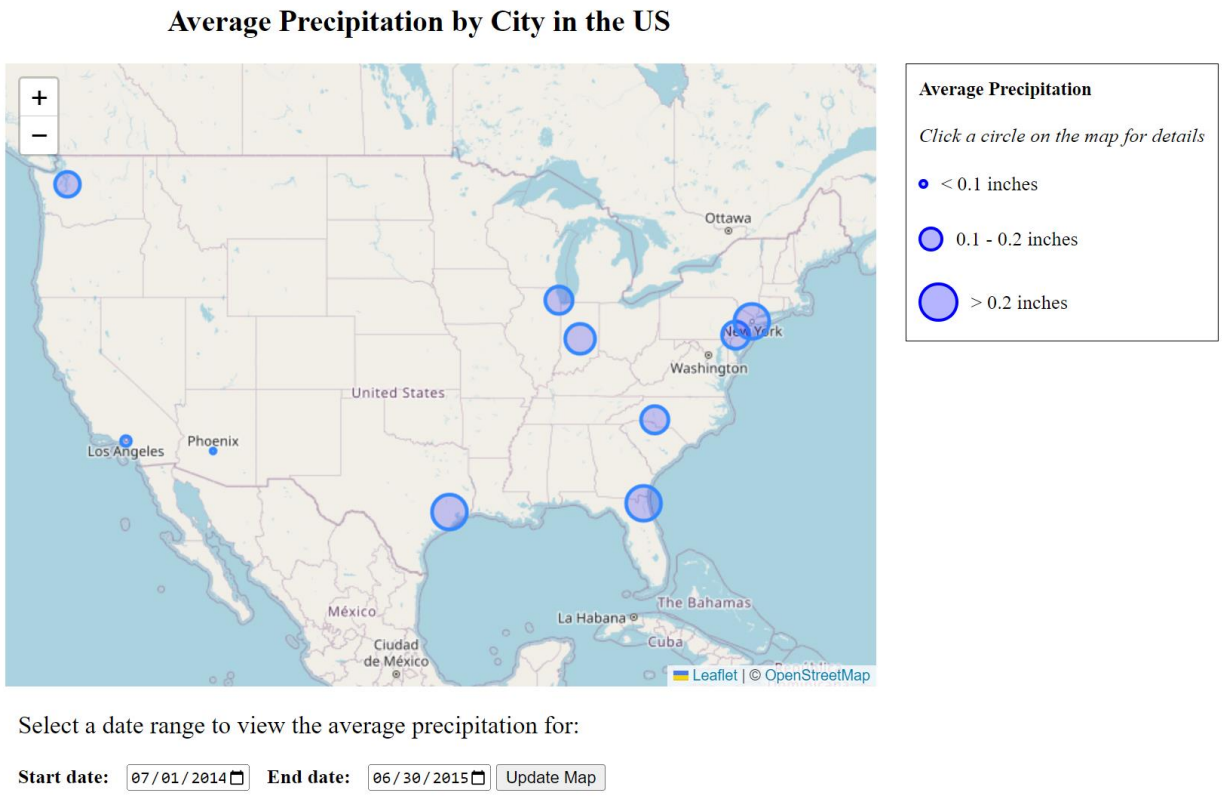
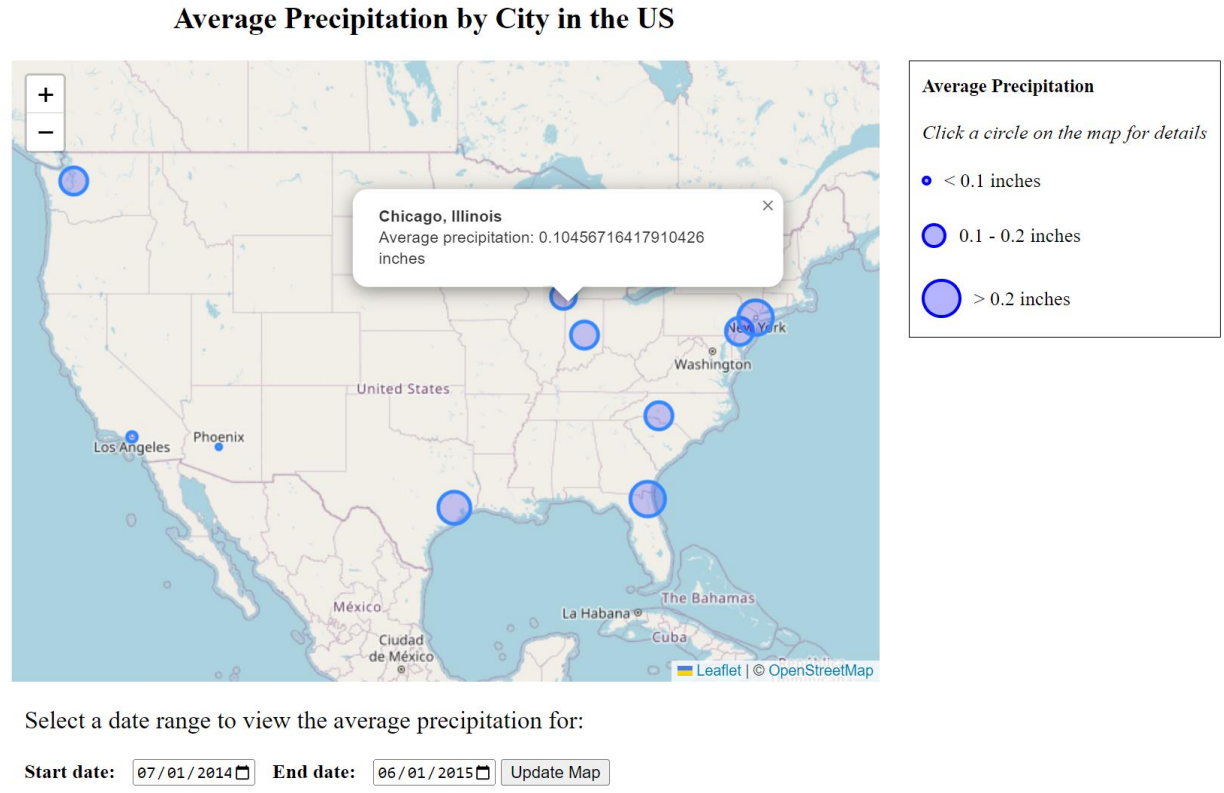
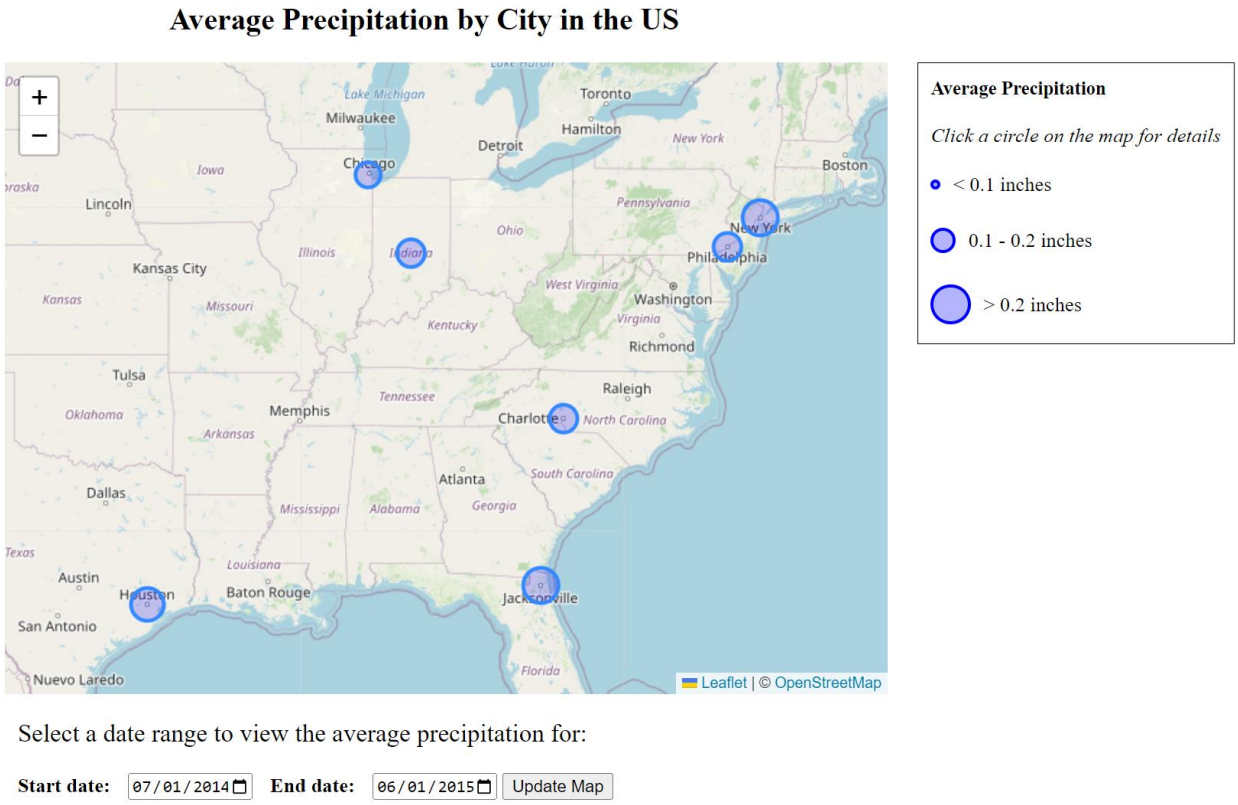
The visualization that I have created is a map of the United States of America, displaying the average precipitation based on a date range specified by the user.



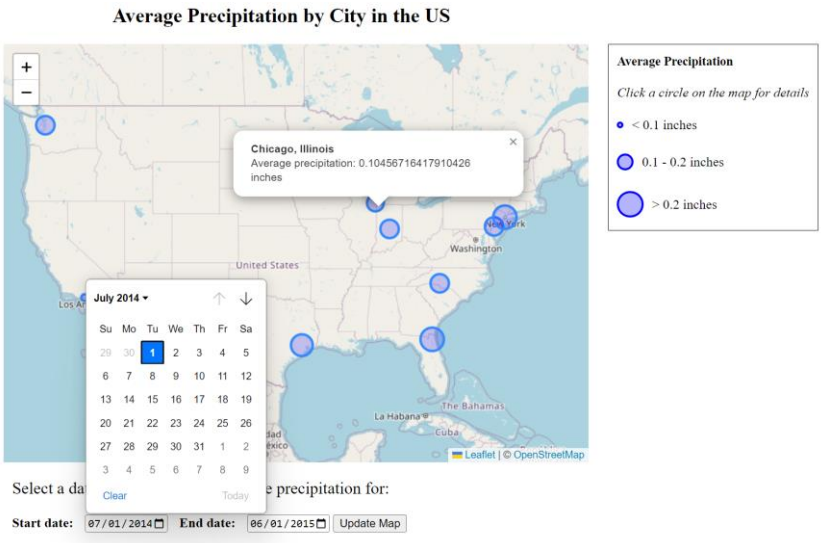
When a user clicks on the circle for each city, they can see the name of the city (i.e. the location) as well as the average precipitation associated with that city for the specified date range, as shown below. The user selected the range from July 1st, 2014, to June 1st, 2015, and can view how the precipitation varies from those dates for cities across the country. For Chicago, Illinois, it can be seen that the average precipitation is approximately 0.104 inches. The legend to the right specifies the on-click feature and how the circle size is dependent on the amount of average precipitation for the specified date range.



Another feature of this visualization, in addition to the on click feature, is the zoom feature. By using the + and – arrows on the left side of the map, the user is able to zoom into certain cities to get a closer look, with the default zoom being set to show 48 US states.



The date range is limited to the range of dates that we have data for, from July 1st, 2014, to June 30th, 2015 and the user interface reflects that as shown below. There is a calendar for easy filtering, similar to user interfaces like travel booking.



This brings me to the next point of user tasks that this visualization supports. First and foremost, this visualization supports comparing and contrasting how average precipitation varies for cities across the US within a certain time frame. Following that, the user can use this visualization for many purposes. If a user is interested in moving to the US or other parts of the US, they can use the visualization to choose a city to move to with more/less rainfall, depending on their preference. Moreover, if a user would like to visit a certain city, but wants to go when there is less rainfall, they can filter by date or for a certain month to determine the amount of rainfall during their planned visit time. This visualization supports viewing 1 city, as well as multiple cities and comparing and contrasting the average precipitation. It allows the user to view trends, by comparing a certain month in 2014 to a certain month in 2015, with respect to the dates for which data is available. This visualization can compare how certain regions of the US compare to others, such as the east coast to the west coast, or south versus north.