Jinrui Fang
INFO 474
Final Project Overview

Github Repository Link

https://github.com/JinruiFang/INFO474_final_project

User Tasks

Based on my project, users could perform tasks such as comparing the average precipitation of different cities, identifying which months have the highest and lowest precipitation levels, and observing any trends or patterns in precipitation over time.

Here are some specific examples:
1. As a meteorologist, I want to compare the average precipitation of different cities so that I can determine which areas have higher or lower precipitation levels.
2. As a city planner, I want to identify which months have the highest and lowest precipitation levels so that I can prepare for potential flooding or drought conditions.
3. As a researcher, I want to observe any trends or patterns in precipitation over time so that I can better understand the impact of climate change on precipitation patterns.

Design Overview

The design overview of the precipitation data visualization is centered around providing an easy-to-understand interface for users to explore and visualize precipitation data. The visualization is designed to be accessible to a range of users, from researchers and analysts to students and hobbyists.

Overall, the design of the precipitation data visualization is intended to facilitate the exploration and understanding of precipitation patterns and trends over time. It enables users to easily compare precipitation levels across cities, identify months with high or low precipitation, and visualize any trends or patterns in precipitation over time.

Screenshot of User Interface

Precipitation of Different U.S. Cities in 2015

By Jinrui Fang
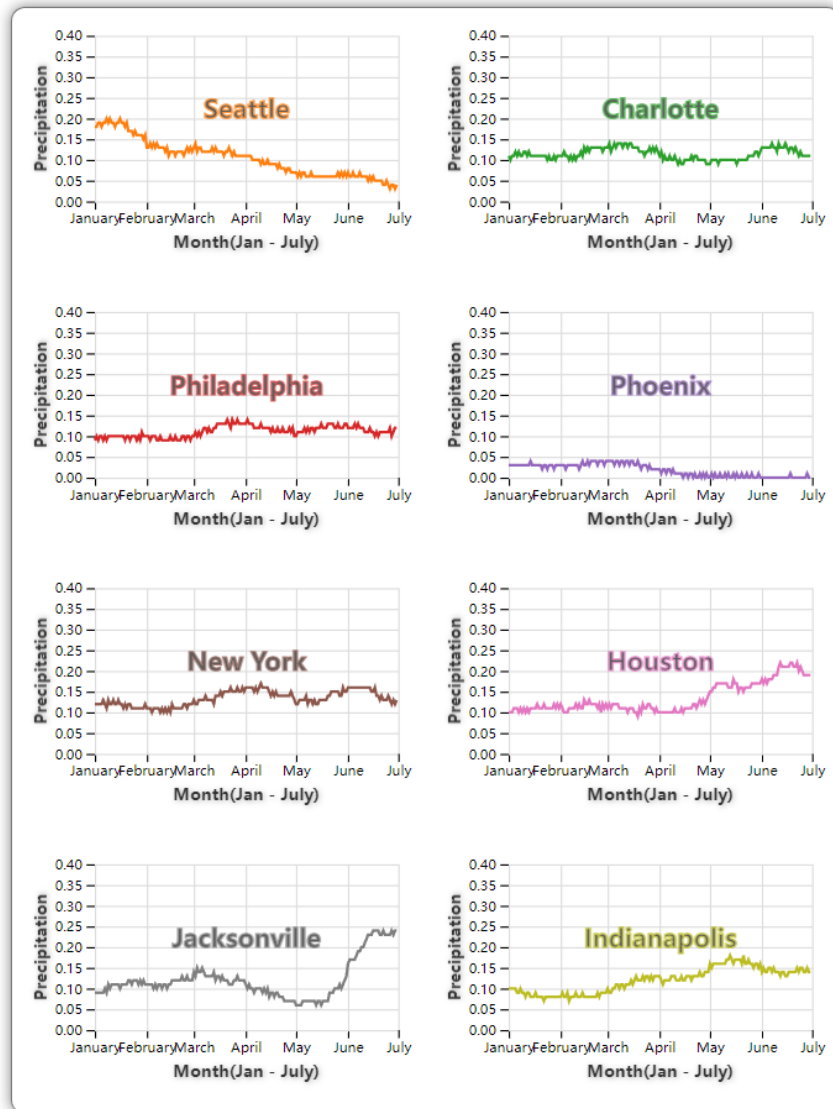
Description

One aspect of the interface that may require clarification is what exactly the precipitation is displayed. As the original dataset contains several columns related to precipitation, my decision was made to use the actual precipitation values to accurately reflect the tendency of precipitation in 2015. To further elaborate, the actual precipitation values are displayed on the y-axis, while the x-axis represents the first half year of 2015. By representing the actual precipitation values, the users can clearly observe the trend in the precipitation for each city.

Furthermore, the color scheme used for representing different cities on the interface has been selected randomly to avoid any confusion or ambiguity. Each city has been assigned a different color by default, and there is no misleading information about the color representation.