

Implemented Interactions:

1. **Country Selection Dropdown** – Users can select a country from a dropdown menu to view water usage data specific to that country.
2. **Year Range Slider** – Users can adjust a slider to select a year between 2000 and 2024, dynamically updating the chart to reflect the selected year.
3. **Pie Chart Visualization** – Displays the proportion of water used for agriculture, industry, and household purposes in a selected country and year.
4. **Legend Display** – Instead of embedding text inside the pie chart, the legend is positioned to the side, making it easier to read the statistics without overlapping the visual elements.

How These Interactions Support Readers:

- **Dynamic Updates** – Allowing users to explore different years and countries helps them analyze trends and variations in water usage.
- **Clear Data Representation** – The pie chart provides an intuitive way to see the relative distribution of water usage categories.
- **Improved Readability** – Moving the text and statistics to a side legend prevents clutter and ensures that users can easily interpret the data.

Example Use Case:

If a user selects "USA" and adjusts the year to "2020," the pie chart updates dynamically to show the distribution of water consumption in that year. The side legend clearly presents the percentages, helping the user quickly compare changes over time.

Project Setup Guide

Water Consumption Dashboard

1. Download the Project Files

Before running the project, download all necessary files, including:

- water_consumption.html
- global_water_consumption.csv

2. Set Up a Local Server

To view the project in a web browser, you need to run a local server using **Visual Studio Code (VS Code) Live Server Extension**.

Using Live Server in VS Code

Step 1: Install Visual Studio Code (VS Code)

If VS Code is not already installed, download and install it from:

→ [Visual Studio Code Download](#)

Step 2: Install Live Server Extension

1. Open **VS Code**.
2. Click the **Extensions** icon in the Activity Bar or press Ctrl + Shift + X.
3. Search for "**Live Server**" and install the extension by **Ritwick Dey**.

Step 3: Open the Project Folder

1. Launch **VS Code**.
2. Navigate to **File > Open Folder**.
3. Select the folder containing your project files.

Step 4: Start Live Server

1. In **VS Code**, locate index.html in the Explorer view.
2. Right-click index.html and select "**Open with Live Server**".
3. Alternatively, click the "**Go Live**" button in the bottom-right corner of VS Code.
4. Your default web browser will open and display the dashboard at:

http://127.0.0.1:5500/HTML/D3Project_Global_water_consumption/water_consumption.html

You should now see the **Water Consumption Dashboard** running locally.