

Summary of the US Natural Disasters Dashboard Design

Introduction

The **US Natural Disasters Dashboard** is an interactive Shiny application designed to provide users with comprehensive insights into natural disasters in the United States from 2003 to 2023.

Overview of the Dashboard

The dashboard consists of four main tabs, each serving a distinct purpose:

1. **Map Tab:** Visualizes disaster counts across states using an interactive map and accompanying bar chart.
2. **Details Tab:** Allows users to analyse the top 5 disaster types within selected states and year ranges through a pie chart and a data table.
3. **Trend Tab:** Provides a line chart displaying disaster trends over time for selected states.
4. **About Tab:** Provides background information about the dashboard and data source.

User Instructions

- **Navigating Tabs:** Use the navigation bar at the top to switch between different sections of the dashboard.
- **Interacting with Visualizations:**
 - **Map Tab:** Click on a state in the map to update the bar chart with specific data.
 - **Details Tab:** Adjust the state selection and year range to update the pie chart and data table.
 - **Trend Tab:** Select one or more states to display their disaster trends over time.
- **Understanding the Data:** Hover over charts where applicable to view tooltips with additional information.

Data Source

The **US Natural Disaster Declarations** dataset is a summary of all federally declared disasters since 1953. The original data comes from the [FEMA website](https://www.fema.gov/national-disaster-declaration). Only data from 2003 to 2023 has been used in the dashboard.

Data source URL: https://www.kaggle.com/datasets/headsortails/us-natural-disaster-declarations?select=us_disasters_m5.csv