

App repository structure

Repository name = drf_tool_1_alt

Files

- 1) global.R
- 2) functions.R
- 3) app.R
- 4) .gitignore

global.R Overview

- Loads main R libraries for analysis.
- Responsible for reading in all data: Country, archetype, inflation, gdp, and population.
- Creates objects that store information for the app: input names for country, archetype, damage type, cost per person inputs, distribution names, and creates objects to store floating strings and numbers.
- Combines Loss (total damage and cost per person) with frequency data.
- Combines all scaling data.
- Also houses some of the UI used in the app.

functions.R

- Stores all the custom functions built for this app.
- Functions were built in the case where code could be generalized for multiple purposes.
- This script is sourced when the app is initiated.

app.R

- Consists of two main functions: (1) ui and (2) server.
- The UI builds the main aesthetic frame of the app and creates all the inputs for use in the server.
- The Server houses all of the analysis:
- “reactive dataframes” were used to dynamically take user inputs and create dataframes for analysis.
- “reactive values” to control the flow of the app (landing page, going back and forth between tabs, etc)
- “UI outputs” to dynamically change the user interface based on inputs from the user. For example, displaying a choice of countries if the user chooses to view countries over archetypes.

Folders

- 1) www
- 2) rsconnect
- 3) guides
- 4) data

www

- Consists of .png and .jpg files for logos.
- “custom.css” files that controls the aesthetics of the app.

rsconnect

- Houses shiny server information for deployment

guides

- Consists of .Rmd files to assist basic and advanced users, as well as a programmers guide to set up the app.

data

- Three subfolders: (1) Archetypes, (2) Countries, and (3) Scale.
- Archetypes:
 - (a) cost_data: This folder consists of all archetype data.
 - (b) freq_data: This folder consists of the corresponding frequency data for archetypes.
- Countries:
 - All the data from EM_DAT, OCHA, and DesInvenar.
 - A key data set to identify which data source is best for each country.
- Scale:
 - Contains all three datasets for scaling: Population, GDP, and Inflation.