Assignment 1: Getting Started (4 Points)

See our MyCourses page for general instructions.

Task 1: SDG Selection (1 Point)

The Sustainable Development Goals (SDGs) were introduced by the United Nations as part of the 2030 Agenda for Sustainable Development. Through the assignments accompanying this course, you will gradually develop a visualization project around a specific Sustainable Development Goal. Inform yourself about the different SDGs on this website and choose one SDG as the focus of your project.

1. Indicate which SDG you selected. (0.5 Points)
2. Explain why you chose this particular SDG. (0.5 Points)

Task 2: Visualization Analysis (2 Points)

1. Select one data-based visualization that speaks to your chosen SDG from publicly available online sources. Include this visualization in your answer, along with a link to its source. Describe how the chosen visualization relates to your SDG. (0.5 Points)
2. Analyze your selected visualization, starting from Tufte's principles. (1.5 Points)
   (a) Produce an answer only based on the lecture materials and *do not* use generative AI. Record that answer.
   (b) Use a generative-AI-based tool to analyze your chosen visualization, starting from Tufte's principles.[1] Record which system and prompt(s) you used as well as the response you obtained.

[1] If you do not currently have access to a generative-AI-based tool, ollama allows you to get started quickly. One of the models with vision capabilities is llava.

(c) Critique the response of your chosen generative-AI tool. What went well and what did not go well?
(d) Based on your initial response and your critique of the AI-generated response, provide an improved analysis of your chosen visualization.

Task 3: Dataset Exploration (1 Point)

1. Identify a dataset that relates to your chosen SDG. The dataset should be publicly available online.[2] Provide a brief description of the dataset and a link to the dataset. (0.25 Points)
2. Create a visualization of an interesting phenomenon arising from your chosen dataset. You can use any available visualization tool, but programmatic approaches are recommended.[3] Note which tool you used and describe what your visualization reveals about your phenomenon of interest. Explain your design choices and maximize the data-ink ratio, within reason. (0.75 Points)

[2] A good starting point for your dataset search is the SDG Data Catalog.
[3] If you have not picked up a programming language, this is an opportunity to do so.