

# DS221 Data Visualization and Storytelling

PORTFOLIO 1 (Description)

# Portfolio 1: 3D Population Density Maps in R

# Objective

The goal of this portfolio is to create engaging 3D population density maps in R, focusing on your chosen demographic data. This will guide you through advanced visualization techniques using R packages.

#### Instructions

You will be given a PDF file that contains the steps on how to create 3D Population Density maps. The provided file contains clues on the description of the data, the basic instructions of each step, and R code to process. However, there are many issues in the project file which should be refined to improve the quality of the resulting visualization.

#### **Tasks**

Based on your understanding of the project, you need to complete the following tasks:

- 1. **Identify Issues**: Based on the knowledge you have learned from this unit, identify the issues in the markdown project which should be revised. Clearly discuss and explain why an issue is a problem for the project.
- 2. **Revise Markdown File**: Provide arguments to revise the markdown file. If necessary, you can revise the code.

# **Team Formation**

Students should form teams of up to four members. Each team should select a demographic data to work on.

# Submission

Your submission should include the following:

- 1. Final Report: A PDF document detailing how to improve the project.
- 2. Running R Markdown File: The revised .rmd file.
- 3. Visualization Output: The final output of the visualization, presented on a Sintra Board.

# Deadline

The deadline for this portfolio is 26 March 2024.