

# MDS 2019 :: Data Visualization :: Project Description

**Project proposal submission deadline:** 6<sup>th</sup> Nov @ 23:30

**Project proposal presentation:** 7<sup>th</sup> Nov

**Final project submission deadline:** 13<sup>th</sup> Dec @ 23:30

**Final project presentation:** 19<sup>th</sup> Dec

## Important:

- Be aware of the University of Porto Policy policy on Plagiarism.
- Properly cite any external source that you used.
- You are not allowed to use or reuse any piece of code **created by other groups**.
- However, you can use any programming language for the development of your work, as well as code that is freely available (open source) on the Internet (provided you understand it).

## Project assessment elements:

### 1. [20 points] Project Proposal

- a. The proposal should be submitted in a A4 document (through Moodle), with font size 11, describing:
  - 1) The dataset
  - 2) The questions you expect to answer by analyzing the data
  - 3) The hypotheses you formulate by an earlier inspection and exploratory analysis of the data
  - 4) The problems you foresee in analyzing the data and creating visualizations

### 2. [80 points] Final Project Development Report

- a. You get points based on the quality of the report, the difficulty of the problem and the novelty of your solution(s).
- b. You need to submit your project report on Moodle.
- c. The final project should be in the IEEE conference format.
- d. The report should include the title, authors, abstract and conclusion.
- e. Clearly explain your project (what problems are you solving), discuss their importance, your solution(s) to tackle the problem and your novelties, in both visualization and data processing to support the visualization.
- f. You need to clearly justify and explain each visualization module in your interface.
  - 1) Clearly explain why you chose these types of visualizations or graphs
  - 2) Clearly explain what you want to present to the user by each of visualization or graph
- g. Clearly cite all tools, libraries and external resources you used in your project. You need to explain what you added, or change, to the existing code and resources.
- h. **Be advised:** it is important that your group can add something (eg. a novel question and answer in a visual form) that differentiates itself from any other group in the class.

### 3. [20 points] Final presentation

- a. Prepare a 15 minutes presentation to demonstrate your visualizations.
- b. You get points based on the quality of the presentation (both oral and visual)