**Individual Optional Bonus Project**

In this project, you may earn bonus points for both the “Principles & Elementary Models” (7MPPEM) course and the “Advanced Machine Learning” (7MPAML) course.

This is for you a real opportunity to integrate the contents of all the Machine Learning courses together as a whole.

You are given a long notebook based on a former Kaggle competition. The notebook is rather messy and not very well organized. Our main goal is for you to understand the analyses used to prepare the competition, clean and reorganize it, and improve the analyses if you choose to. You are expected to document the whole process and write a well justified report on it.

There are two mandatory objectives to the project and an optional one.

Mandatory objectives:

* Run the basic project notebook on your local computer or on Google Colab and provide a well-organized functional notebook for us to test and inspect.
* Write a detailed report on the strategies used to solve the different issues addressed in the project notebook or on your own personal (and different) strategies. I know this may sound a bit vague, but in the real life of a data scientist, things are even more nebulous – at least you already have a fairly well-prepared dataset! In any case, keep two things in mind: performance and explainability!!!

Optional objective:

* You may submit your solutions directly on Kaggle and check your score and / or ranking on the leaderboard. This is an objective way of checking how you compare with others in the community. Please, do this only if you have some new and original solutions, not the one offered in the notebook.

Deadline:

* December 1st 2023