M2 BD Sup de Vinci, 2025

Exam: Introduction to MLOps
Date: 2025/04/01

To conduct your exam, you should use your access to the SPP Cloud, and make use of the VS-Code service: https://datalab.sspcloud.fr/

Context:
- Following your practical session on the "nace-prediction", we want to use the same approach and the same project structure applied to a new model.
- The model that you will need to build will be based on the "hospital readmission" project
- The clean version of the data is shared on Cesar with the class: DSA-2025_clean_data.tsv
- The model needs to be a XGBoost model

Objectives:
- Put in place the necessary code to train with "MLFlow run" your XGBoost model using a grid search approach on at least 2 hyper-parameters
- Integrate into your code the required MLFlow calls to capture the results of your grid search (Using `mlflow.autolog()`is not allowed)
- Capture the MLFLow visualization that will help you find the best model, and explain your choice.
- Put in place a python wrapper to enable the call to your model
- Put in place a FastAPI application to serve your model through a REST API.

Deliverable:
- Public git repository to share with the instructor.