Configuration Manual

MSc Research Project
Fintech

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MSc Project Submission Sheet

School of Computing

Student Name: … Patricio Andrés Garay Pacheco……

Student ID: …21221154……

Programme: …MSc in Fintech…… **Year:** …2023……..

Module: …Research Project (MSCFTD1)……

Lecturer: … Noel Cosgrave……

Submission Due Date: …14/08/23……

Project Title: … Comparative Analysis of Interpretability and Accuracy between Gradient Bosting Machine and Explainable Boosting Machine on Default Credit domain ……

Word Count: …484…… **Page Count:** …4……

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.
ALL internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

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PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST

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Assignments that are submitted to the Programme Coordinator Office must be placed into the assignment box located outside the office.

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1 Software Configuration

1.1 Google Colab

Python Version: Python 3.10.6
Dataset: default of credit card clients.xlsx.
Libraries and Packages: scikit-learn: 1.2.2
interpret: 0.4.2
pandas: 1.5.3
seaborn: 0.12.2
numpy: 1.22.4
matplotlib: 3.7.1
lime: 0.2.0.1

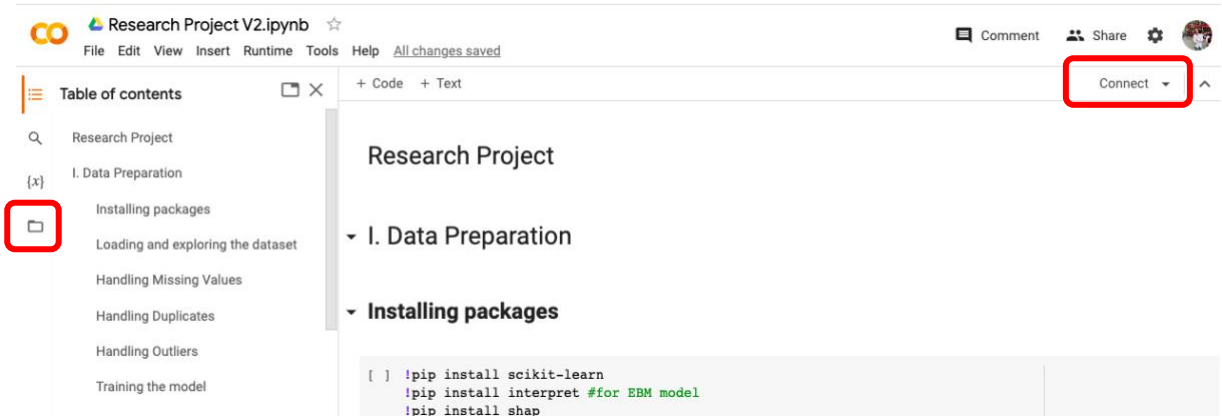
2 Environment Setup

2.1. Setup Google Colab

Step 1: Google Colab.

Go to the following link. Then, connect to Python 3 by clicking the "connect" button in the upper right corner, as shown in Figure 1, marked within a red box.

Figure 1: Connecting to Python 3 Google Compute Engine backend.



Step 2: Updating the dataset.

Firstly, download the dataset named default of credit card clients. Store this data set in the download folder. Secondly, the dataset must then be uploaded to Google Colab. To do this, you must click on the folder highlighted in red on the right edge of the centre of Figure 1. Later, select the icon highlighted with a red box in the left upper corner in Figure 2, select the download folder from your computer, and select the previously downloaded dataset. Figure 3 shows the dataset uploaded; it would take a couple of minutes to be uploaded.

Figure 2: Uploading the dataset.

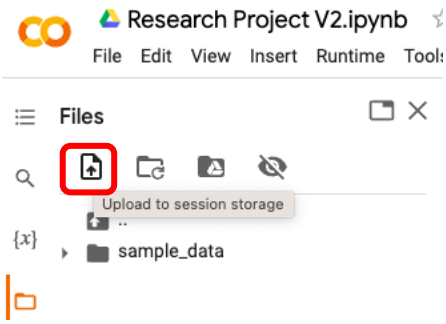
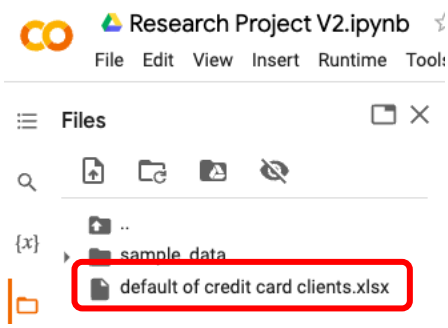


Figure 3: Dataset uploaded already.



Step 3: Run codes.

Finally, it is to install the packages and libraries if necessary. It will depend on each user. Then, run the codes provided in the code artefact document.