National College of Ireland

Configuration Manual

MSc Research Project
MSc.AIBUS

Shilpa.Pilla
23154713

School of Computing
National College of Ireland

Supervisor:Andreson Simiscuka

National College of Ireland

MSc Project Submission Sheet

School of Computing

Student Name: ……. ……shilpa.pilla…… ……
23154713

Student ID: ……..……

Programme: ……AIBUS…… **Year:** 2023-2024……..

Module: MSc Research Practicum
……..……

Lecturer: Anderson Simiscuka……..…. ……

Submission Due Date: …12-08-2024……..……

Project Title: Impact of Direct marketing Strategies in Consumer Behaviour……....

Word Count: 420 …… **Page Count:** ……9……..……..……

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.

Signature: ……Shilpa.pilla…… …

Date: ……12-08-2024……

PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST

Attach a completed copy of this sheet to each project (including multiple copies)	☑
Attach a Moodle submission receipt of the online project submission, to each project (including multiple copies).	☑
You must ensure that you retain a HARD COPY of the project, both for your own reference and in case a project is lost or mislaid. It is not sufficient to keep a copy on computer.	☑

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

Office Use Only	
Signature:	
Date:	
Penalty Applied (if applicable):	

Configuration Manual

Shipa.Pilla
23154713

1.Introduction

This configuration manual provides detailed instructions for setting up, configuring, and running the Direct Marketing Strategies in Banking Sector project. It guides users through the installation process, project setup, data preparation, and execution of the code used in the study.This document is intended for data scientists, researchers, and software developers who wish to replicate or extend the research conducted in this project. Familiarity with Python programming and basic machine learning concepts is recommended.

2.System Requirements

Minimum Hardware Requirements

- **Processor:** Intel Core i5 or higher
- **RAM:** 8 GB minimum (16 GB recommended)
- **Storage:** 10 GB of free space for project files and data

  This project was run on a system with the below hardware requirements (300 GB free storage)

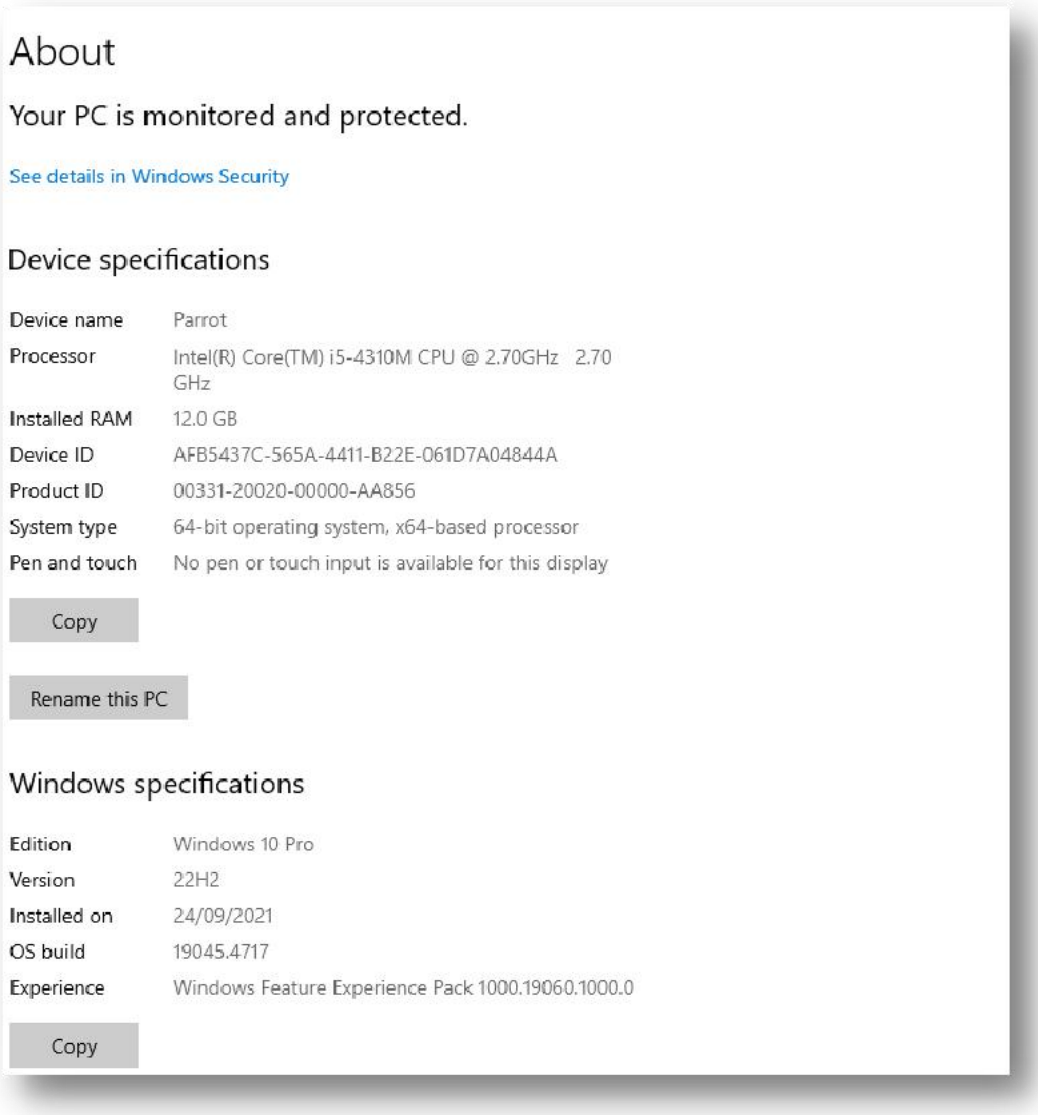

Figure 1: System hardware

Software Requirements

- **Operating System:** Windows 10, macOS, or Linux
- **Python Version:** Python 3.7 or higher
- **IDE:** Jupyter Notebook (recommended) or any Python-supported IDE (e.g., PyCharm, VS Code)

  This project was developed using python3.7 on Google Colab

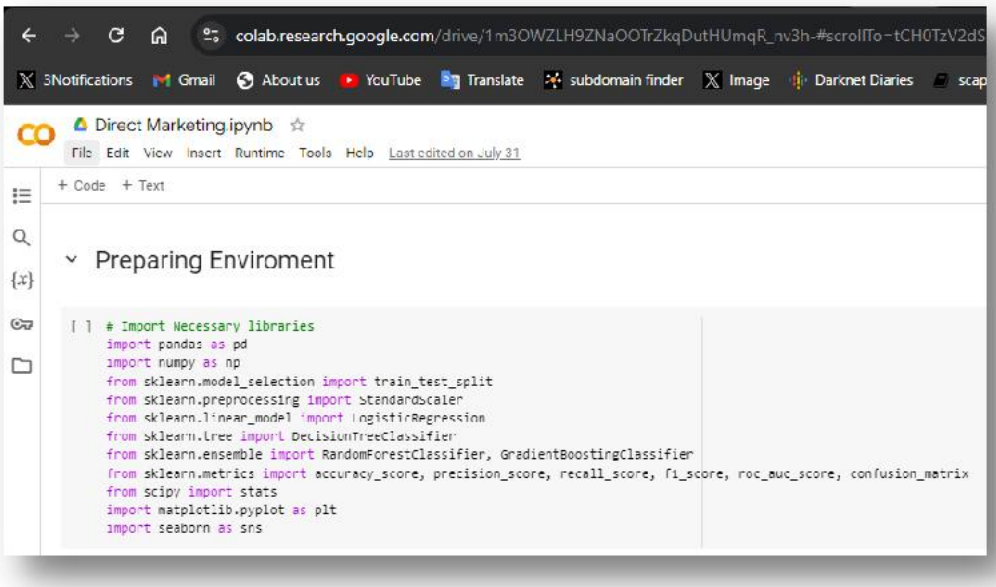

Figure 2: Colab Environment

Your second section. Change the header and label to something appropriate.

3. Project Setup

Installation of Python and Required Libraries

1. **Install Python:**
    - Download and install the latest version of Python from the official website: Python.org
    - Ensure that Python is added to your system PATH during installation.
2. **Install Required Libraries:**
    - Open a command prompt or terminal and run the following command to install the necessary Python libraries:

Figure 3: Installing the libraries

Setting Up the Project Environment

1. **Create a Project Directory:**

- Create a new folder on your PC to save all project files and datasets.

2. **Clone or Download the Project Files:**
   - Download the project files from the colab link.
   - Save them in the project folder created earlier.
3. **Launch Jupyter Notebook:**
   - Open command prompt.
   - Navigate to your project directory using the cd command.
   - Launch Jupyter Notebook by typing:

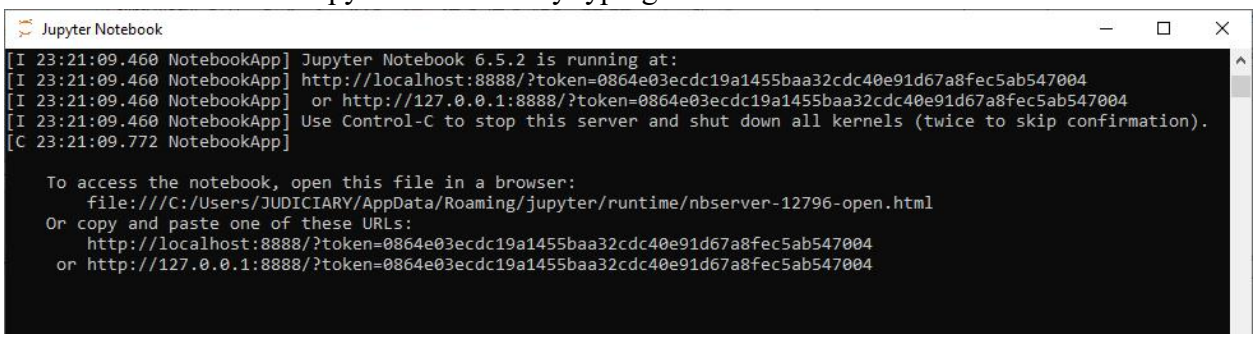

Figure 4: Running/Starting the notebook

   - This will open the Jupyter Notebook interface in your default web browser.

4. **Data Setup**

Dataset Overview

- The project uses the Banking Dataset Marketing Targets dataset from Kaggle, which contains client information and their responses to direct marketing campaigns.
- **Source:** Kaggle Dataset
- **License:** CC0: Public Domain

Downloading and Preparing the Dataset

1. **Download the Dataset:**
   - Visit the Kaggle dataset link provided and download the dataset as a CSV file.
2. **Load Data and Notebook file:**
   - In the Jupyter Notebook / Colab, load the notebook file and the dataset

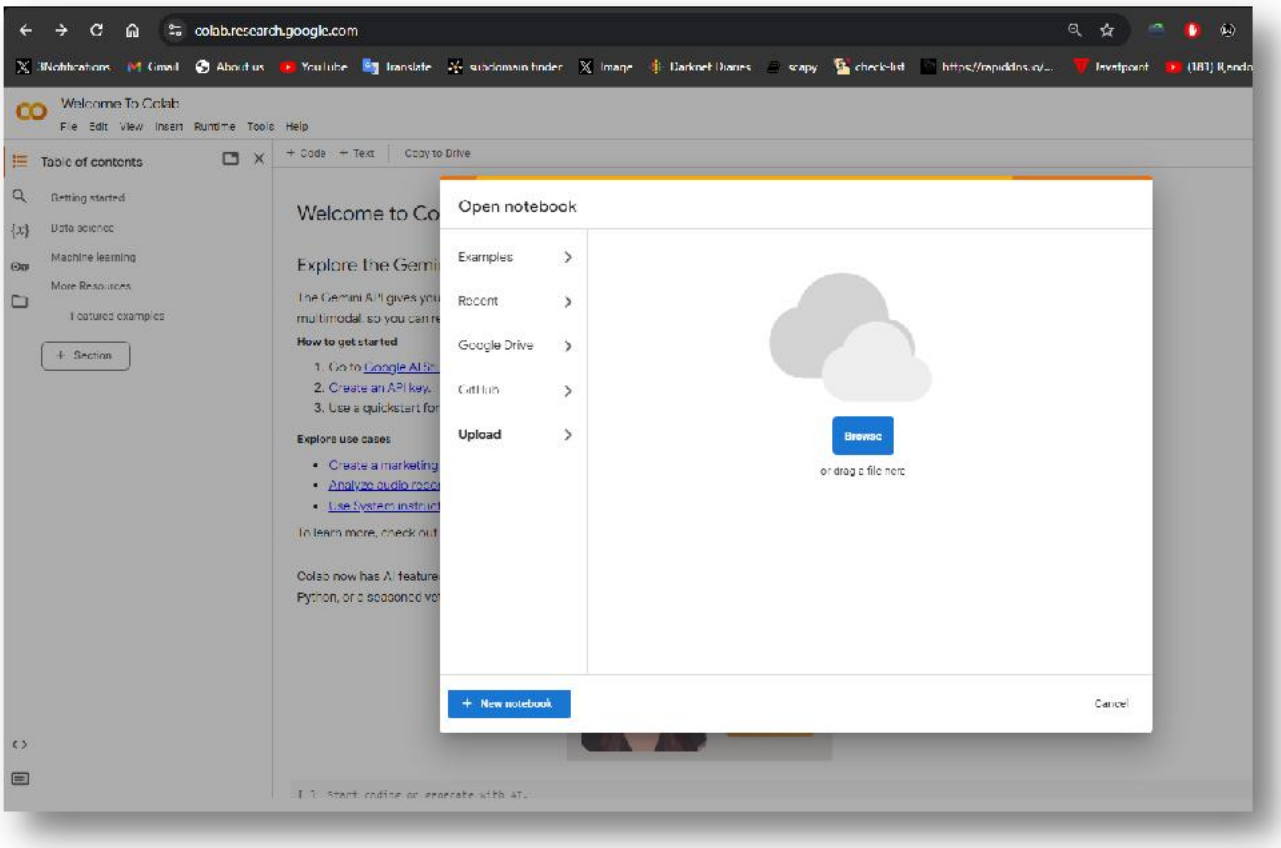

Figure 5: Loading the notebook

Loading the dataset

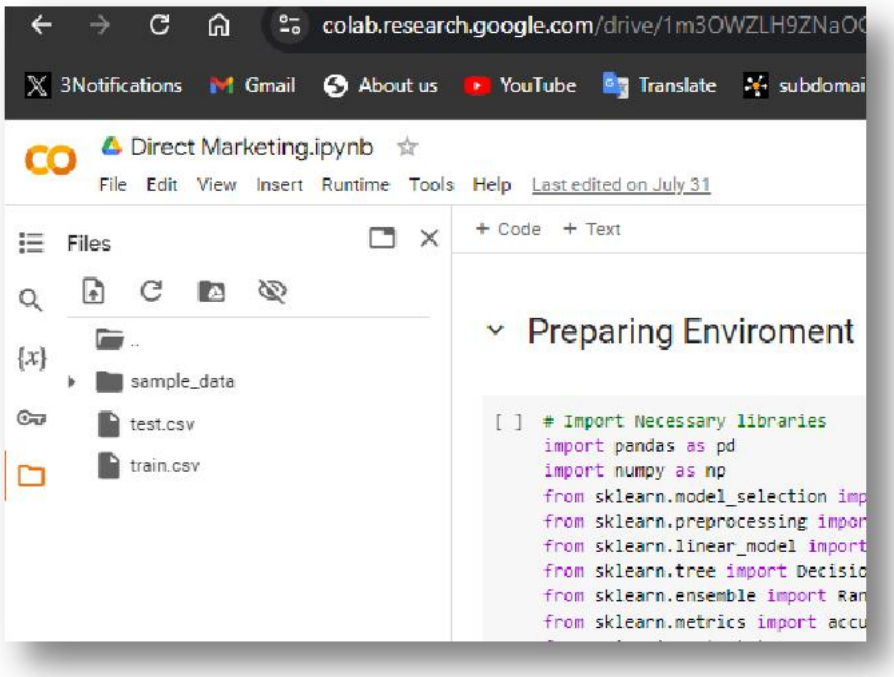

Figure 6: Loading Dataset

Final step is to execute the notebook command cell, do this by clicking the run all option in the runtime dropdown.

References

Acquisti, A., Brandimarte, L. and Loewenstein, G. (2020). Secrets and likes: The drive for privacy and the difficulty of achieving it in the digital age, Journal of Consumer Psychology 30(4): 736–758.

Crespo, I. and Govindarajan, A. (2018). The analytics-enabled collections model. Accessed: Aug 2024.
URL:
https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/the analytics-enabled-collections-model

Cui, G., Wong, M. L. and Lui, H.-K. (2006). Machine learning for direct marketing response models: Bayesian networks with evolutionary programming, Management Science 52: 597–612