

## Week 7 Deliverable

Group Name: Data Go

### **Team member's details :**

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**Problem Statement:**

ABC Bank wants to sell its term deposit product to customers and before launching the product they want to develop a model which helps them in understanding whether a particular customer will buy their product or not (based on customer's past interaction with bank or other Financial Institution).

**Business understanding:**

The objective of this project is to develop a predictive model for ABC Bank to determine the likelihood of customers subscribing to their term deposit product. By analyzing customer interactions with the bank and other financial institutions, the machine learning model will identify potential clients who are more likely to purchase the product. This will enable the bank to optimize their marketing efforts by focusing resources on customers with a higher probability of conversion, thus enhancing campaign efficiency and reducing costs. The project will assess model performance with and without using the "duration" feature while also addressing any data imbalance through suitable techniques.

**Project life cycle along with deadline:**

- Week 7 ( due date 19 August 2023): Create Github repo and finish data intake report.
- Week 8 ( Due date 26 August 2023): Data Understanding and approach
- Week 9 ( Due date 2 Sept 2023): Data Cleaning
- Week 10( Due date 9 Sept 2023): Perform exploratory data analysis
- Week 11(Due date 16 Sept 2023): Create presentation slides
- Week 12(Due date 23 Sept 2023): Model Selection and Model Building/Dashboard
- Week 13 (Due date 30 Sept 2023): Final report, solution, presentation slides

# Data Intake Report

Name: Bank Marketing (Campaign)

Report date: 8/19/2023

Internship Batch: LISUM23: 30

Version: 1.0

Data intake by: Rishi Aluri

Data intake reviewer: Terry Chou

Data storage location: [https://github.com/yuh39/Bank\\_Marketing\\_Group\\_Project](https://github.com/yuh39/Bank_Marketing_Group_Project)

Data source: <https://archive.ics.uci.edu/dataset/222/bank+marketing>

**Tabular data details:** bank-additional.csv

<b>Total number of observations</b>	4118
<b>Total number of files</b>	1
<b>Total number of features</b>	21
<b>Base format of the file</b>	.csv
<b>Size of the data</b>	570 KB

**Tabular data details:** bank-additional-full.csv

<b>Total number of observations</b>	41188
<b>Total number of files</b>	1
<b>Total number of features</b>	21
<b>Base format of the file</b>	.csv
<b>Size of the data</b>	5.56 MB

**Tabular data details:** bank.csv

<b>Total number of observations</b>	4521
<b>Total number of files</b>	1
<b>Total number of features</b>	17
<b>Base format of the file</b>	.csv
<b>Size of the data</b>	451 KB

**Tabular data details:** bank-full.csv

<b>Total number of observations</b>	45211
<b>Total number of files</b>	1
<b>Total number of features</b>	17
<b>Base format of the file</b>	.csv
<b>Size of the data</b>	4.4 MB

**Github Repo link:**

[https://github.com/yuh39/Bank\\_Marketing\\_Group\\_Project/tree/main](https://github.com/yuh39/Bank_Marketing_Group_Project/tree/main)