

**Group name:** Laaroussi Saadeddine

**Name:** Laaroussi Saadeddine

**Email:** [laar.saad.eddine@gmail.com](mailto:laar.saad.eddine@gmail.com)

**Country:** Morocco

**Specialization:** Data science

**Project:** Bank Marketing (Campaign)

**Batch code:** LISUM09

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## Problem description

- ABC Bank wants to sell its term deposit product to customers.
- Before launching the product, they want to develop a model that will help 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

- ABC Bank wants to use ML (machine learning) model to shortlist customers whose chances of buying the product are higher.
- They want their marketing channel (tele marketing, SMS/email marketing etc) to focus only on those customers whose chances of buying the product are higher.
- The data is related with direct marketing campaigns of a Portuguese banking institution. The marketing campaigns were based on phone calls. Often, more than one contact to the same client was required, in order to access if the product (bank term deposit) would be ('yes') or not ('no') subscribed.
- The classification goal is to predict if the client will subscribe (yes/no) a term deposit (variable y).

## Project lifecycle along with deadline

**Deadline:** 30 July

**11 June – 18 June:** problem description, business understanding, deadline determination, project lifecycle, data intake report.

**18 June – 25 June:** data exploration for types and problems in data like NA values

**25 June – 2 July:** Data cleansing and transformation

**2 July – 9 July:** EDA of data and recommendation

**9 July - 16 July:** EDA presentation for business users

**16 July – 23 July:** Model Selection and Model Building

**23 July – 30 July:** Final Project Report and Code

# Data Intake Report

Name: Laâroussi Saâdeddine

Report date: 13-06-2022

Internship Batch: LISUM09

Version: 0.1

Data intake by: Laâroussi Saâdeddine

Data intake reviewer: Laâroussi Saâdeddine

Data storage location: <https://archive.ics.uci.edu/ml/datasets/Bank+Marketing>

## Tabular data details:

### Bank

<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 Ko

### Bank-full

<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>	4 503 Ko

## Proposed Approach:

- Cleaning data by checking null values and duplicate values
- Adding columns
- Describing the data and finding correlation between numerical features to search for possible outliers
- Removing outliers
- Analyzing the data:
- Selecting model and making predictions.
- Giving a recommendation in which company to invest

## Github repo link:

[https://github.com/Saad-code13/Internship\\_Assignment](https://github.com/Saad-code13/Internship_Assignment)