

# Week 7 Data Glacier

Team Name: **Data 4 Science**

## Team Member Details-

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## Problem Statement

XYZ Bank wants to roll out Christmas offers to their customers. But the bank does not want to roll out the same offer to all customers; instead they want to roll out personalized offers to particular sets of customers. If they manually start understanding the category of customer then this will not be efficient and also they will not be able to uncover hidden patterns in the data (patterns which group certain kinds of customers in one category). Bank approached ABC analytics company to solve their problem. Bank also shared information with ABC analytics that they don't want **more than 5 groups** as this will be inefficient for their campaign.

## Business Understanding

The bank expects analysts from ABC company to create a classification model based on the given dataset. The aim is to create a model that will categorize customers into five different categories based on various socio-economic data provided. By categorizing customers or potential sets of customers with the help of the model, the bank can now provide customized offers and increase their chances of a particular set of customers buying their offer.

***Project life cycle along with deadline (Weeks are counted after 29th August)***

**Week 7-** Business understanding

**Week 8-** Data understanding

**Week 9-** Data cleaning and transformation

**Week 10-** EDA performed on the data & Final Recommendation

**Week 11-** EDA presentation for business users

**Week 12-** Selecting a base model and then explore 1 model of each family if its classification problem then 1 model for Linear models, 1- Model for Ensemble, 1-Model for boosting and other models if you have time (like stacking)

**Week 13** (Deadline 15th October 2021)- Providing the link of your code and report.

**Data Intake Report**

Name: Bank Marketing (Campaign)

Report date: 4th September 2021

Internship Batch: LISUM02

Version: 1.0

Data intake by: Team Data 4 Science

Data intake reviewer:

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

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

Total Number of Observation	4521
Total Number of Files	1
Total Number of Features	16 + Output attribute.
Base Size Format of the file	451 KB
Size of the data	4522*17

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

Total Number of Observation	45211
Total Number of Files	1
Total Number of Features	20 + Output attribute.
Base Size Format of the file	4503 KB
Size of the data	45212*17

GitHub Repo Link: [https://github.com/HamzaAlHajjChehade/Bank\\_Marketing\\_Campaign](https://github.com/HamzaAlHajjChehade/Bank_Marketing_Campaign)