

## Team Details:

**Group Name:** Data Detectives

|                         |                                |                              |
|-------------------------|--------------------------------|------------------------------|
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| <b>Country:</b>         | Saudi Arabia                   | Turkey                       |
| <b>College/Company:</b> | Virtual University of Pakistan | Marmara University           |
| <b>Specialization:</b>  | Data Science                   | Data Science                 |

## Problem Description:

ABC Bank intends to develop a model that can predict which clients are most likely to buy their new term deposit product. They will be able to target their marketing activities more successfully as a result, concentrating on clients who are more likely to make a purchase. The project will involve building and evaluating machine learning models using customer data. The model's success will be measured by its ability to accurately predict buyers and the resulting cost savings from optimized marketing efforts.

# **Business Understanding:**

## **Problem Statement:**

ABC Bank aims to launch a new term deposit product. However, their current marketing approach lacks precision, making it difficult to identify customers most likely to be interested. This leads to missed sales opportunities and potentially wasted marketing resources.

## **Goal:**

By leveraging a targeted marketing approach, we aim to identify high-potential customers for the new term deposit product, optimizing outreach and maximizing sales success.

## **Key Business Features:**

- Customer Demographics
- Customer Banking History
- Campaign Information

## **Objectives:**

- Develop a predictive model to identify potential term deposit buyers.
- Improve marketing efficiency by focusing on high-potential customers for term deposits.
- Minimize wasted marketing spend on unlikely term deposit buyers.

## **Success Metrics:**

- Enhanced Term Deposit Product Adoption
- Increased Customer Acquisition Efficiency for Term Deposits
- Improved Marketing Return on Investment (ROI) for Term Deposits

## Project Lifecycle:

| Week # | Deliverable # | Submission Date | Submission Details                                |
|--------|---------------|-----------------|---|
| 7      | 1             | 19 May, 2024    | Project selection and Group Details               |
| 8      | 2             | 26 May, 2024    | Understanding the Dataset                         |
| 9      | 3             | 2 June, 2024    | Data Cleaning and Transformation                  |
| 10     | 4             | 9 June, 2024    | EDA   |
| 11     | 5             | 16 June, 2024   | EDA Presentation and Proposed modeling techniques |
| 12     | 6             | 23 June, 2024   | Model Selection and Model Building                |
| 13     | 7             | 1 July, 2024    | Final Project Report                              |

## Data Intake Report:

{[https://github.com/bisma-azeem-13/LISUM32\\_Final\\_Project/blob/main/Data%20Intake%20Report.pdf](https://github.com/bisma-azeem-13/LISUM32_Final_Project/blob/main/Data%20Intake%20Report.pdf)}

## Github Repository Link:

{ [https://github.com/bisma-azeem-13/LISUM32\\_Final\\_Project](https://github.com/bisma-azeem-13/LISUM32_Final_Project) }