Bank Direct Marketing

**Group 17**

**Group Members’ Names and Emails:**

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1. **What is (are) the problem(s) for investigation (research questions)** [Be very specific and write only the research problems/questions]**.**

The goal of this project is to predict whether the customers will respond the bank’s direct marketing campaigns by subscribing to a bank’s product (term deposit) based on customers’ characteristics including age, job, education, etc. We will analyze data to address the following questions:

Which types of customers are more likely to respond to a bank’s direct marketing and subscribe a bank term deposit?

How effective is the bank’s marketing campaign based on phone calls?

1. **Why the aforementioned research problem(s) is (are) important?** [Not more than two paragraphs. Include references]**.**

The bank implements direct marketing campaigns based on phone calls, aimed to persuade customers to subscribe the bank’s term deposit. However, the studies show that the increasing number of marketing campaigns over time has a less effect on the general public (Al-Shayea 2013). Thus, bank needs to identify specific groups of existing customers who have a higher chance to subscribe to a term deposit, so that the bank can evaluate and focus their marketing efforts on those specific clients.

Kadhim Al-Shayea, Qeethara. (2013). Evaluating Marketing Campaigns of Banking Using Neural Networks. *Proceedings of the World Congress on Engineering 2013 Vol II.*

1. **Information about the dataset:** 
   1. What is the dataset about? [Not more than one paragraph].
   2. What is the source of dataset? [Be specific. Provide the URL is applicable].

The Banking Marketing dataset is retrieved from UCI Machine Learning Repository: https://archive.ics.uci.edu/ml/datasets/Bank+Marketing.

* 1. Which variable in your dataset will be your target variable in your analyses? [Be specific. You can only have ONE target variable. The target variable is what you are going to predict in your analyses. If you are going to do unsupervised analysis, which does not have a target variable, please say so].
  2. Which variable in your dataset will be your predictor variables in your analyses? [Be specific. The predictor variables are the variables that will help you predict the target variable].

1. **What data mining techniques do you expect to use** [supervised or unsupervised? Name the expected techniques].
2. **Provide the timetable for your work** [put milestones and plan the activities in a table format].