Week 7 Deliverables

Group Name: Starbucks
Name: Shuran Fu
Email: fushr@outlook.com
Country: United States
College: USC
Specialization: Data Science

Problem description

Develop a machine learning model to estimate whether a particular customer will buy a specific term deposit product or not based on the customer's past interaction with bank or other Financial institution.

Business understanding

The bank wants to promote its product to customers who have higher possibility to purchase and they have the data of the customers' information and past interaction, thus a significant prediction model will help the bank to decrease the time spent and the cost. It will enhance the employees' efficiency when they decide to have a contact with the customers.

Project lifecycle along with deadline

1. Exploratory Data Analysis / Data Cleaning and Transformation—— July 26
2. Feature Engineering / Feature Selection / Model Building —— August 8
3. Model Selection / Business Recommendation / Slides —— August 16
4. Result Validation and fix ——August 23

Data Intake Report

Name: Bank Marketing Campaign

Report date: July17, 2022

Internship Batch: LISUM10

Version:1.0

Data intake by: Shuran Fu

Data intake reviewer: NA

Data storage location: https://github.com/joshf117/DataGlacier/tree/main/Bank%20Project/data

Tabular data details:

Total number of observations	45211
Total number of files	6
Total number of features	21
Base format of the file	.csv / .txt
Size of the data	11.5MB

Proposed Approach:
- Exploratory Data Analysis
- Data Cleaning
- Feature Engineering and Selection
- Model Comparison
    - linear methods
    - tree-based models
    - boosting methods
    - neural network

Github Repo link

https://github.com/joshf117/DataGlacier/tree/main/Bank%20Project