Assignment 4: Evaluating Machine Learning Models

In our previous lab session, we explored essential techniques for evaluating machine learning models. For classification problems, we covered the Confusion Matrix, Precision, Recall, F1 Score, AUC Score, and the ROC Curve. For regression tasks, we learned about metrics such as Mean Squared Error (MSE) and the R^2 Score. This assignment is designed to help you reinforce these concepts and prepare you for your upcoming lab project.

Dataset: You can access the dataset using the following link: **Dataset Link**

Your Task:

1. Begin by performing data preprocessing on the provided dataset.
2. Choose and apply a classification algorithm of your choice.
3. Evaluate your model's performance using the evaluation techniques discussed in the lab notebook.

Submission Instructions: You will submit your Google Colab notebook through a Google Form (link to be shared soon).
Note: *There won't be a separate viva for this assignment, but your code will be reviewed and graded.*