Project Phase1

Submission due date: 2/12 - 11:59 pm

1. **Choose a dataset:**
   Choose a dataset that matches your personal interests or addresses a specific problem you aim to solve.
   No one is allowed to use the same datasets I have used in my codes.

2. **Algorithm Implementation:**
   Implement the K-Nearest Neighbors (KNN), Naive Bayes, and Logistic Regression algorithms **on your dataset.**
   For each algorithm, optimize the model parameters to maximize performance.

3. **Model Evaluation:**
   Assess the performance of the models using the Receiver Operating Characteristic (ROC) curve and the Area Under the curve (AUC).

4. **Results Analysis:**
   Interpret the results, and compare the performance of the three algorithms based on the ROC and AUC scores.
   Then discuss which algorithm performed best and why.

How to submit:

You should upload the following:

1- Your dataset file.
2- your code as a .py file.
3- document contains description of your dataset , Screenshots of your codes , and which algorithm performed best and why.

Notes:

The grade will be based on THE DISCUSSION ONLY , No one will take any grades if he did not discuss on the due date.

The discussion will be based on THE SUBMITTED FILES ONLY , so make sure to submit the correct files as required.