



Daffodil *International* **University**

COURSE CODE: CIS 412L

COURSE TITLE: ARTIFICIAL INTELLIGENCE LAB

ASSIGNMENT: FALL-2022 (CIS 6)

DEPARTMENT OF COMPUTING AND INFORMATION SYSTEM (CIS)

TITLE: TWO FRIENDS & KAGGLE COMPETITION

Abhishek & Krish are two friends who applied to a Machine Learning competition on the Kaggle website. As Abhishek is good at discrete value calculation so he solved the heart diseases dataset (heart.csv) problem very soon, but Krish was slow and tried to solve the problem. They loved the competition and learned a lot from that.

DATASET:

LAB PART:

25 MARKS

- | | |
|---|-----|
| (1) Solve the above dataset problem by doing necessary codes and using your own choice Machine Learning models. | 12 |
| (2) Give a proper description of the dataset (columns, rows, dataset size). | 1 |
| (3) Calculate the Confusion Matrix and Accuracy of the model. Describe the Confusion Matrix briefly. | 2.5 |
| (4) Visualize the dataset and fit the line graph. | 2 |
| (5) Visualize the ROC curve and give a proper explanation of the ROC curve. | 5 |
| (6) Visualize the training and testing error graph of your own proposed model. | 2.5 |

General Instructions

- (1) **Deadline:** 1st November.
- (2) **You have to submit the assignment in .pdf format (Name it with your ID such as xxx-16-xxx.pdf), Zip the file if any supplementary files are needed.**
- (3) Submit the assignment in the **Smart Edu LMS assignment section**, the option of submission will be available there very soon.
- (4) **The deadline is fixed**, no excuse will be considered if you missed the deadline.
- (5) **Marks will be deducted accordingly if any plagiarism of work is provided.**