**Assignment 1**

* This is a group task. You can create **groups of two** within yourselves.

Please fill the group details here -<https://bit.ly/mlws_a1_group>

* ~~Please finish the assignment~~ **~~before 12 pm on 29 May 2023, Monday.~~***~~Your access to the drive would be revoked after 12pm.~~*
* Please finish the assignment **before 9 am on 30 May 2023, Tuesday.** *Your access to the drive would be revoked after 12pm.*

***Submission Link -*** [***https://bit.ly/mlws\_a1\_submissions***](https://bit.ly/mlws_a1_submissions)

Your submission should be named as **A1\_groupname.ipynb.**

Only one submission per group is required.

**Create a classification model using either the Decision Tree or Random Forest Algorithm.**

Dataset Link - <https://bit.ly/mlws_a1_dataset>

You will be graded on the following parameters.

1. *Loading the dataset and displaying a sample set of data - 1 point*
2. *Basic Visualisations*
   1. *Scatter Plot - 1 point*
   2. *BONUS POINT - Any other relevant graph - 2 points*
3. *Creating the train-test datasets and training the model - 4 points*
4. *Testing the model and displaying the test accuracy. - 1 point*
5. *Evaluating the model performance*
   1. *Accuracy - 1 point*
   2. *Confusion Matrix - 1 point*
   3. *BONUS POINT - Precision, Recall and F1 Score - 2 points*
6. *Adding proper comments/ documentation to the code/ code blocks - 1 point*

Total - 10 points + 4 Bonus Points

**Assignment 2**

The 2nd assignment would be an in-class online test. The topics will be the basics of machine learning algorithms, neural networks and deep learning.