

Project Description (Data Science)

In this project you will implement a Deep learning model aiming at classifying a binary or multi-class dataset.

You should focus on the dataset selection criteria from any website like [Kaggle](#). Select any type of dataset like CSV files or images dataset.

You should use any Deep learning model that you learned in this course.

You should improve the model's layers to fit well in dataset and get the high performance.

Steps:

- 1- Preparing the dataset(preprocessing if needed)
- 2- Choosing the most suitable model for the problem (you can do that by searching similar problems).
- 3- Training & Testing the model.
- 4- Modifying the neural network layers to improve efficiency (make sure no overfitting or underfitting happens).
- 5- Preparing presentation for your project, It will include:
 - Introduction (the problem, idea).
 - Dataset (number of rows, number of columns, target columns, features, the source of the data, training data and testing data).
 - Data preprocessing (if needed).
 - Models (the reason of choosing it & modification made in it).
 - Results (table) & Conclusion.

Bonus:

- Using more than one model with modifying the layers of both of them for better predicting.
- Apply preprocessing on images (when using image dataset)

NOTE: Strictly avoid copying your colleague's project. That would amount to plagiarism. Penalty in case plagiarism is detected: zero marks will be assigned for all parties whose project would be considered as plagiarized OR copies of each other.

The project delivery will be in the practical's week