

## Cairo University Faculty of Engineering Machine Learning



## Final Project, Phase 1

## **DESCRIPTION:**

As per the Sample of Pattern Classification Problem definition, <u>within this link</u>, we need to follow the same pattern for the final project. In this phase, the objective is to we need to start planning for the course final project by defining the problem, confirm that you have the dataset and start planning for the different modules of the project, ex:

- Do you need a preprocessing module and what are the different preprocessing component needed?
- What are the candidate features to be extracted?
- etc...

You are requested to present a different example of a classification Data science problem that you will be employing later as the course project, briefly describe the:

- The Data Science problem you are tackling (its definition and significance)
- Available dataset(s), that you will use in the project.
- If there is any preprocessing needed in this project (Denoising, Segmentation...)
- The features that should be extracted.
- The candidate Classification / Regression techniques that you propose using to solve the problem.

## **GENERAL INSTRUCTIONS:**

- This is a group-based assignment, the group is formed of 4 at max.
- The topic selected by each team should be <u>Unique</u> (no repeated topics among teams).
- The first report for the course report should be submitted through Google classroom.
- The due date for the submission of this phase is Saturday, 5/04/2025.
- You are permitted to discuss the following problems with others in the class. However, you must write up your own solutions to these problems. Any indication to the contrary will be considered an act of academic dishonesty. Please Review the definition of cheating in the first presentation.

Best Regards,

Inas A. Yassine