# **BFCAI Summer Training – Machine Learning Final Project Description**

## Group 4

You are required to implement your own final project as *individual*, you have some requirements to do in criteria of *100 points*:

## • Implementation – (50 Points)

- O Perform Exploratory Data Analysis with Visualization (10 points)
- O Clean your data as much as possible including removing outliers if exist (5 points)
- Encode any categorical attribute in your dataset if exist (5 points)
- O Standardize your attributes if possible (10 points)
- Use **Stacking Technique** to classify your records (10 points)
- Tune your hyperparameters using <u>GridSearchCV</u> to give better performance (5 points)
- Visualize your model performance (train against validation) including ROC-AUC curve and training performance (5 points)

### • Evaluation – (10 Points)

- Your model Performance will be evaluated using <u>Precision</u> metric against hidden test set.
- O You should achieve at least 93% of the specified metric.

### • Presentation – (20 Points)

- O Submit your notebook as part of the presentation (5 points)
- Create your own PowerPoint presentation at maximum 10 Slides showing your proposed work (5 points)
- O Discuss your project in maximum of 5 Minutes in front of your mates (10 points)

## • Communication – (20 Points)

- Record a video about 2 minutes showing your notebook and the proposed work
  (5 points)
- O Post your video with description on your *LINKED IN* profile and add a mention to the trainer @Yousef Elbaroudy and add hashtag of #BFCAI and #MachineLearning (5 points)
- O Upload your notebook on your Kaggle account and make it public (5 points)
- O Upload your proposed work on your account through Github platform (5 points)

**Trainer:** Yousef Elbaroudy