### **ASSIGNMENT**

## Predicting a Player's position based on the attributes

Using the data, create a model that accurately predicts/assigns a players position based on the individual attributes.

The following steps should be clearly elucidated:

- 1. Data Cleaning
- 2. Features considered for EDA and further steps.
- 3. Exploratory Data Analysis Undertaken
- 4. Inference from EDA
- 5. Choice of Best Algorithm and Why
- 6. Training Accuracy
- 7. Predictions with test data

Dataset: https://www.kaggle.com/karangadiya/fifa19

**Duration**: ½ day (4 Hours)

**Difficulty Level**: Easy (Ability to think)

# Format of Output required for Data Science:

### Assessment 1

- 1. Complete Code (Python Notebook) (This should contain 2,4,5 and 7 automatically)
- 2. List of Features considered Relevant for Model and the Train Test Split.
- 3. Excel Sheet of Cleaned Preprocessed Data( The whole dataframe need not be sent)
- 4. Relevant Exploratory Data Analysis conducted to be recorded in the notebook
- 5. Training accuracy, Testing accuracy and Confusion Matrix in the script
- 6. Excel Sheet of the Test set With Player Details, Predicted Position and Actual Position
- 7. Function that asks the user for their values and returns the output for the Values that can be entered by user.(For us to test with our values)

#### Thus 3 files to be mailed:

- 1 notebook file and
- 2 excel sheets, with the notebook containing 2,4,5,7