# FIFA Player’s Value prediction

# using machine learning

**Your Name**

**Your ID**

# About Data:

The datasets provided include the player's data for the Career Mode from FIFA 15 to FIFA 21 ("players\_21.csv"). the dataset has all the available and important features of all football players from all over the world, their names, ages, nationalities, flags, wages, values, shooting, etc.

The data is publicly available here <https://www.kaggle.com/datasets/stefanoleone992/fifa-21-complete-player-dataset>

# Problem Statement:

The goal of this project is to predict the VALUE of a player using machine learning techniques based on all the given features. We used different machine models like Random Forest, XGboost, and GradientBoost to predict the VLAUE of the player. We will be using the mentioned machine learning models to train on the training data and then we will do the prediction using the testing data. The data analysis and visualization will be done with care.

# Methods:

The main goal as discussed above is to predict the Value of player based on the performance. For this purpose, we will be using machine learning algorithms like Gradient boosting, XGboost, and Random Forest etc. we will first prepare our data, do all the required data analysis and data cleansing, after that we will split the data into test and train sets, we will train the machine learning models on the training data and test it on testing data.

# Intended Experiments:

To reach the goal, we have to perform some basic exploratory data analysis on the data, this analysis will include to check any missing values in the dataset, checking for outliers and treat the outliers of present. We will perform feature engineering to extract all the highly required features. After performing each and everything, the next step will be to import all the mentioned models above and train them. This way we can achieve high accuracy and do the prediction well.