**Structured Data Classification Assignment**

### **Problem Statement**

* Download the dataset from ‘<https://www.hackerearth.com/practice/algorithms/string-algorithm/string-searching/practice-problems/machine-learning/predict-ad-clicks/>’
* Split train and test data in 70:30 ratio using ‘Stratified split’ and save test data separately. Use the split train data for building the model.
* Extract features that are relevant for classification
* Identify the target variable.
* Do all the necessary pre-processing steps like One-hot encoding, Treating missing values, Standardization, converting categorical to numerical data, etc. wherever necessary.
* Handle any class imbalance, if required.
* Split the data into 80:20 for train and validation.
* Apply different classifiers and check validation accuracy.
* Calculate the cross-validation score, precision, recall and also display the confusion matrix.
* Evaluate the accuracy on test set.