**Data Science Analytics Assignment | ZYKRR**

You are given a dataset which is about heart attack prediction and you have to create a predictive model for the same.

You have 18hrs from the time you receive this assignment. Please also do list any library/package you used in the assignment which is not commonly used.

Here are the following things we except out of this assignment.

1. Your findings
   1. How certain features are related to each other
   2. Handling missing values, outliers and unbalanced data
   3. A PPT or Streamlit App or Jupyter Notebook exported as PDF or other format to present the findings (should not include code).
2. Maximising the Recall and Precision Metrics instead of Accuracy
3. Able to explain the reasoning on certain approaches you decided to go with.

About the dataset:

1. Age: Age of the patient
2. sex: Sex of the patient
3. exang: exercise induced angina (1 = yes; 0 = no)
4. ca: number of major vessels (0-3)
5. cp: Chest Pain type chest pain type

Value 1: typical angina

Value 2: atypical angina

Value 3: non-anginal pain

Value 4: asymptomatic

1. trtbps: resting blood pressure (in mm Hg)
2. chol: cholestoral in mg/dl fetched via BMI sensor
3. fbs: (fasting blood sugar > 120 mg/dl) (1 = true; 0 = false)
4. rest\_ecg: resting electrocardiographic results

Value 0: normal

Value 1: having ST-T wave abnormality (T wave inversions and/or ST elevation or depression of > 0.05 mV)

Value 2: showing probable or definite left ventricular hypertrophy by Estes' criteria

1. thalach: maximum heart rate achieved
2. target: 0= less chance of heart attack 1= more chance of heart attack