**ADMN 5016**

**AI APP**

**PATEL MANTHAN NILESHBHAI**

**HETUL AJEYKUMAR GAJJAR**

**APPLIED ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**

**PROFESSOR JOSEPH SANTARCANGELO**

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* **Description of the Dataset:**

The dataset is about various features affecting on the heart, and result into the attack. The detailed description of each variable is mentioned below:

* Age: Age of the patient
* Sex: Sex of the patient
* exang: exercise induced angina (1 = yes; 0 = no)
* ca: number of major vessels (0-3)
* cp: Chest Pain type chest pain type
  + Value 1: typical angina
  + Value 2: atypical angina
  + Value 3: non-anginal pain
  + Value 4: asymptomatic
* trtbps: resting blood pressure (in mm Hg)
* chol: cholestoral in mg/dl fetched via BMI sensor
* fbs: (fasting blood sugar > 120 mg/dl) (1 = true; 0 = false)
* 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.
* thalach: maximum heart rate achieved.
* target: 0= less chance of heart attack 1= more chance of heart attack.
* **Summary of the project:**

We are interested in analysing the data and would like to build regression-based prediction model of heart attack. Basically, using our model we would like to see whether each factor has any significant impact on heart, and how they are correlated with the heart attack at the end. The ideology behind this proposal is how to reduce the impact of each factor associated with the heart attack, and it’s happening to increase the life span.

* **The link of the dataset:**

[Heart Attack Analysis & Prediction Dataset | Kaggle](https://www.kaggle.com/datasets/rashikrahmanpritom/heart-attack-analysis-prediction-dataset)