**Date: Oct 16th,2022**

**DS – 630 Machine Learning**

**Project proposal**

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**Project Title**: Heart Attack Prediction

**Dataset**: heart.csv

**About Dataset:**

Data features are Age, Sex, CP, TRTBPS, Chole, FPS, RestECG, ThalaCHH, EXNG, OldPeak, SLP, CAA, Thall, and Output.

Age: Age of the person

Sex: Gender of the person

CP: Chest Pain type

TRTBPS: Resting Blood Pressure (in mm HG)

Chole: Cholesterol (in mg/dl)

FBS: Fasting Blood Sugar (mg/dl)

RestECG: Resting electrocardiographic results

Thalachh: maximum heart rate achieved

Exng: Exercise-induced angina

OldPeak: Previous Peak Point

Slp: Slope

Caa: number of major vessels

Thall: Thal rate

Output: Target Variable

Dataset is taken from Kaggle: <https://www.kaggle.com/code/lakshathas/heart-attack-eda-prediction-with-9-model-95/data>

**Final Outcomes**:

I'll utilize a Support Vector Machine, Random Forest Classifier, and Gradient Boosting Machine Learning Model for this project in an effort to determine which of these models works the best and provides the most accuracy.

Project References

For outliers

<https://www.statisticshowto.com/statistics-basics/find-outliers/>

<https://www.scribbr.com/statistics/outliers/>

<https://seaborn.pydata.org/generated/seaborn.countplot.html>