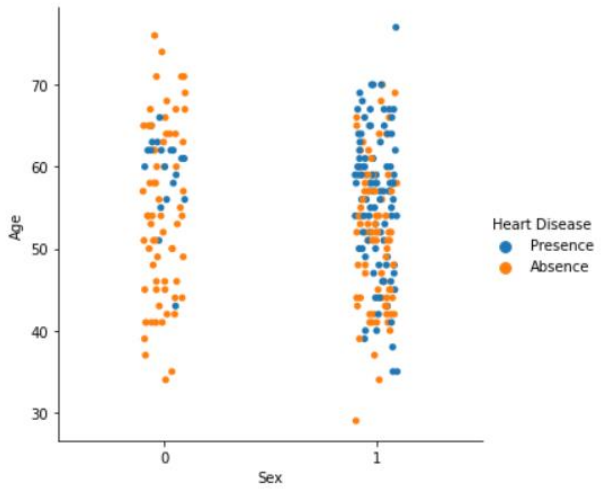
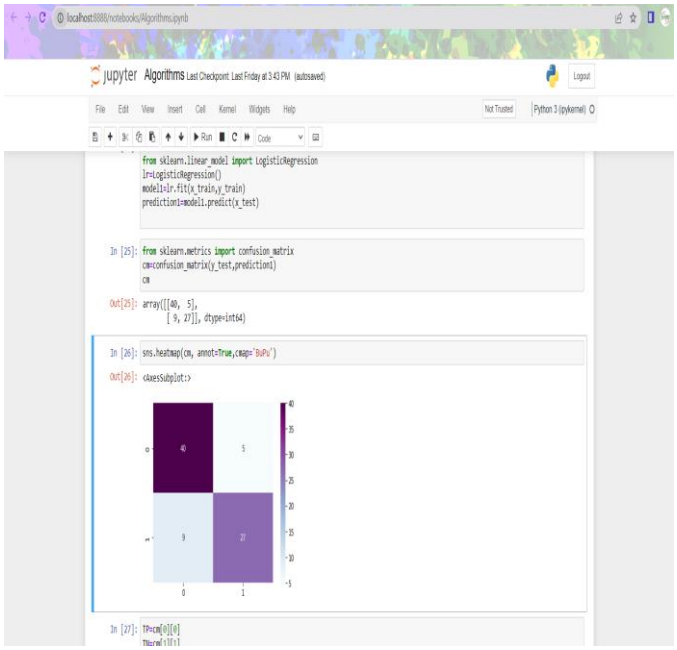
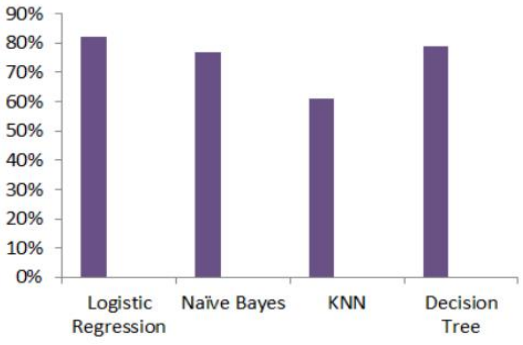
Project Development Phase
Model Performance Test

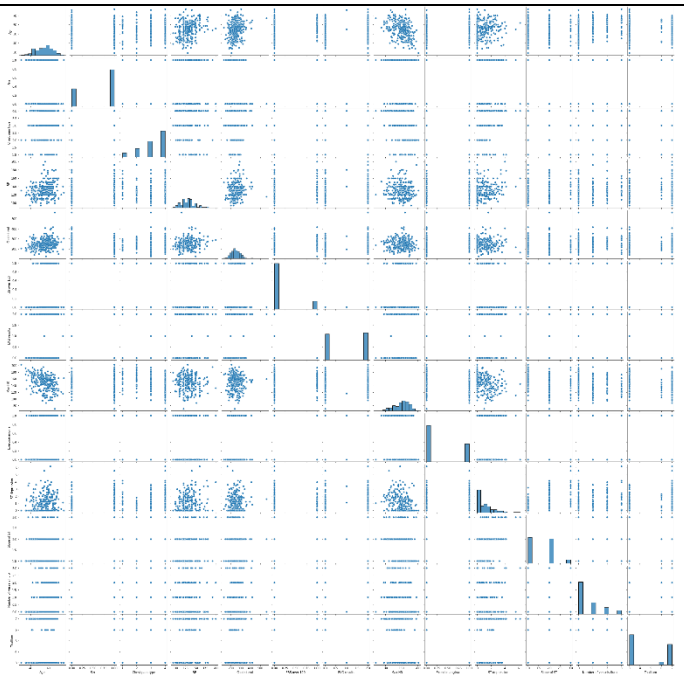
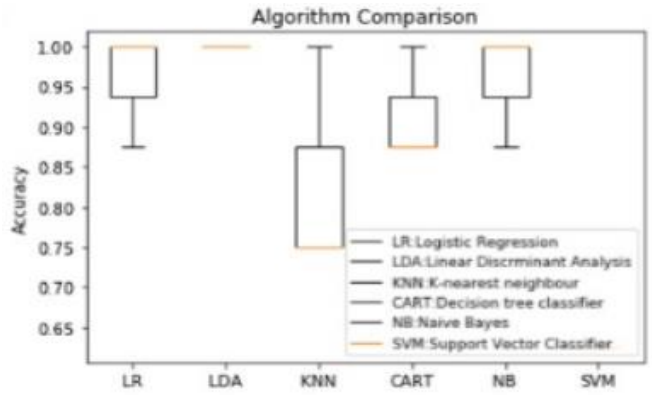
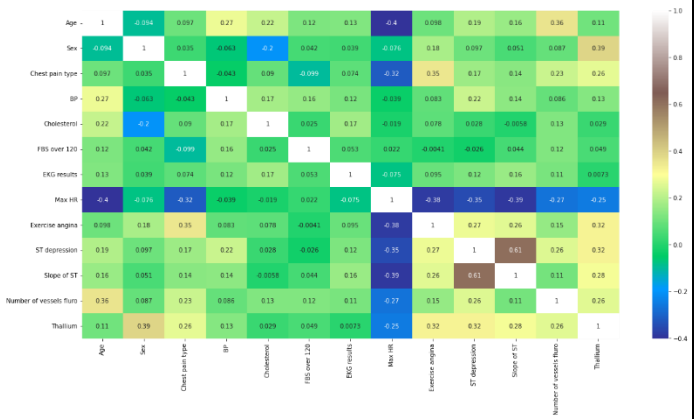
Date	10 November 2022
Team ID	PNT2022TMID28916
Project Name	Project - Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	10 Marks

Model Performance Testing:

The project team shall fill in the following information in the model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Metrics	**Regression Model:** MAE - , MSE - , RMSE - , R2 score - **Classification Model:** Confusion Matrix - , Accuray Score- & Classification Report -	$MAE = \frac{1}{N}\sum_{i=1}^{N} \lvert y_i - \hat{y} \rvert$ $MSE = \frac{1}{N}\sum_{i=1}^{N} (y_i - \hat{y})^2$ $RMSE = \sqrt{MSE} = \sqrt{\frac{1}{N}\sum_{i=1}^{N} (y_i - \hat{y})^2}$ $R^2 = 1 - \frac{\sum (y_i - \hat{y})^2}{\sum (y_i - \bar{y})^2}$ Where, $\hat{y}$ — predicted value of y $\bar{y}$ — mean value of y  MAE - , MSE - , RMSE - , R2 score(in graph)

			 PNT2022TMID28916 **Accuracy:** print('Logistic Regression :',l) print('KNN :',k) print('Naive Bayes :',n) print('Decision Tree :' ,d) Logistic Regression : 0.8271604938271605 KNN : 0.6111111111111112 Naive Bayes : 0.7794117647058824 Decision Tree : 0.796296296296296 *Comparing and finding the accuracy of Algorithms.*  *Fig. Visual analytics of all the 4 algorithms used.* Accuracy (in percentage) and Classification Report(in a bar chart)

2.	Tune the Model	Hyperparameter Tuning - Validation Method -	 Hyperparameter Tuning   Validation Method