

LARGE GROUP PROJECT

CARDIO- HEART DISEASE PREDICTION WITH FRAMINGHAM HEART STUDY DATA

TEAMMATES:

1. LIKITHA KANAKA LAKSHMI KHAMBHAMPATI
2. NAGA SASI SRAVYA TEEGALA
3. SRILEKHA NANABALA

Link : <https://www.kaggle.com/code/muzammilrizvi1/heart-disease-random-forest/notebook>

GitHub : <https://github.com/srilekhananabala/CARDIO-HEART-DISEASE-PREDICTION.git>

This is the dataset.

Columns - 16

Rows – 4240

Target variable – 10year CHD

Preprocessing:

We got missing values after running preprocessing.

Hyperparameter Tuning:

We have used Random Forest and did the hyperparameter tuning.

Best Parameters:

```
{'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 100}
```

Model Building:

By using these best parameters, we built the random forest model.

Model Evaluation:

Model	Training Accuracy	Testing Accuracy
Random Forest	0.87	0.83