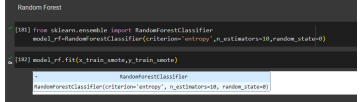
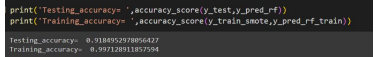


Project Development Phase Model Performance Test

Date	9 November 2023
Team ID	Team-592006
Project Name	FetalAI: USING MACHINE LEARNING TO PREDICT AND MONITOR FETAL HEALTH
Maximum Marks	10 Marks

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Model Summary	-	
2.	Accuracy	Training Accuracy - 0.99712 Validation Accuracy - 0.91849	
3.	Confidence Score (Only Yolo Projects)	Class Detected - Confidence Score -	

Model Summary :

Random Forest

```

from sklearn.ensemble import RandomForestClassifier
model_rf=RandomForestClassifier(criterion='entropy',n_estimators=10,random_state=0)

[182] model_rf.fit(x_train_smote,y_train_smote)

```

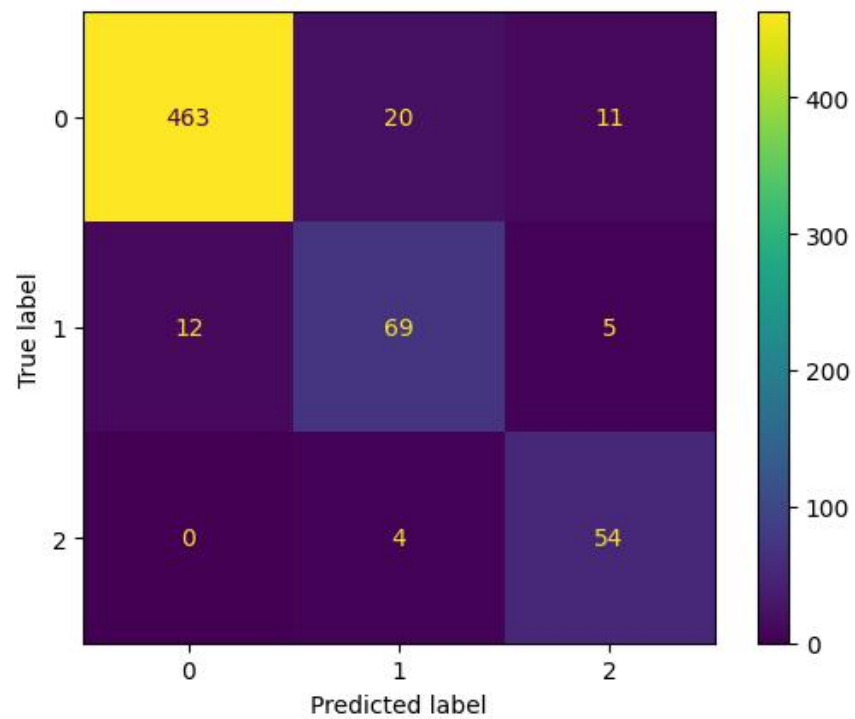
RandomForestClassifier
RandomForestClassifier(criterion='entropy', n_estimators=10, random_state=0)

Training and Testing Accuracy :

```
[186] print('Testing_accuracy= ',accuracy_score(y_test,y_pred_rf))  
      print('Training_accuracy= ',accuracy_score(y_train_smote,y_pred_rf_train))
```

```
Testing_accuracy= 0.9184952978056427  
Training_accuracy= 0.997128911857594
```

Confusion Matrix:



Classification Report:

```
✓ [191] print(classification_report(y_test,y_pred_rf))
```

	precision	recall	f1-score	support
1.0	0.97	0.94	0.96	494
2.0	0.74	0.80	0.77	86
3.0	0.77	0.93	0.84	58
accuracy			0.92	638
macro avg	0.83	0.89	0.86	638
weighted avg	0.92	0.92	0.92	638