Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID18408
Project Name	Exploratory Analysis of Rainfall Data in India for Agriculture
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.	Metrics	**Classification Model:** Confusion Matrix - Accuracy Score- Classification Report -	```
			y_pred = cat.predict(X_test)
			print(confusion_matrix(y_test,y_pred))
			print(accuracy_score(y_test,y_pred))
			print(classification_report(y_test,y_pred))
			
			[[21510 1207]
			 [2795 3580]]
			0.8624364086346762
			              precision recall f1-score support
			
			           0 0.89 0.95 0.91 22717
			           1 0.75 0.56 0.64 6375
			
			    accuracy 0.86 29092
			   macro avg 0.82 0.75 0.78 29092
			weighted avg 0.85 0.86 0.85 29092
			``

2.	Tune the Model	Hyperparameter Tuning – Validation Method -	``` {'learning_rate': 0.1, 'max_depth': 8} 0.8892227301457538 Accuracy:83.11 % Standard Deviation:17.73 % ```