Project Development Phase Model Performance Test

Date	26 June 2025	
Team ID	LTVIP2025TMID59671	
Project Name	Revolutionizing Liver Care : Predicting Liver	
	Cirrhosis Using Advanced Machine Learning	
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 (Random Forest - Tuned)			
	IVIC CITES	Confusion Matrix,				- 50
		Accuracy Score & Classification Report	0 -	11	12	- 40
		classification report	Actual			- 30
			ra -	5	56	- 20
						- 10
			0 1 Predicted			
					0.12	
			Edema0.30 0.2	29 0.06 0.19 0.01 0.55 0.12 0.27	1.00 0.32 -0.09 -0.19 0.20 0.00 0.11 0.06 0.32 1.00 0.37 -0.07 0.41 0.14 0.40 0.38	-0.18 0.11 0.13 - 0.2
					0.09 0.37 1.00 0.27 0.20 0.15 0.45 0.36 0.19 0.07 0.27 1.00 0.06 0.17 0.31 0.23	0.0
			Alk_Phos0.04 0.1	14 -0.04 -0.78 -0.03 -0.00 0.10 0.04	0.20	0.03 -0.12 0.01
			Tryglicerides 0.09 0.1	15 0.15 -0.12 0.04 0.17 0.10 0.15	0.11 0.40 0.45 0.31 0.32 0.12 1.00 0.25 0.06 0.38 0.36 0.23 0.34 0.09 0.25 1.00 0.18 0.05 0.27 0.46 0.06 0.03 0.15 0.21	0.21 0.27 0.19
			Prothrombin - 0.08 0.1	12 0.24 -0.05 -0.06 0.04 0.18 0.25	0.11 0.25 0.30 0.71 0.23 -0.12 0.45 0.27	0.6
			N_Days -	Prug - Age - Sex - Ascites - Patomegaly - Spiders -	Edema - Bilirubin - Cholesterol - Albumin - Copper - AR_Phos - SGOT - SGOT -	Platelets Prothrombin Skage
				Fitting 5 toids t ☑ Best Hyperpara	or each of /2 candidates, tameters Found: {'max_depth'	cotalling 360 fits : None, 'max_features
				Recall to 18.00 Med Accuracy: 0.7976 Precision: 0.8235 Recall: 0.9180 F1 Score: 0.8682	5 5 9	
				Classification	n Report: recision recall f1-score	support
				0 1	0.69 0.48 0.56 0.82 0.92 0.87	23 61
				accuracy macro avg weighted avg	0.80 0.76 0.70 0.72 0.79 0.80 0.78	84 84 84

2.	Tune the Model	Hyperparameter Tuning	
		Validation Method	