

Project Development Phase

Model Performance Test

Date: 28 June 2025

Team ID: LTVIP2025TMID41166

Project Name: *Revolutionizing Liver Care: Predicting Liver Cirrhosis Using Advanced Machine Learning Techniques*

Maximum Marks: *(To be evaluated)*

Model Performance Testing:

S.No.	Parameter	Values
1	Model Summary	<ul style="list-style-type: none">- Dataset: Indian Liver Patient Dataset (UCI Repository)- Features used: Age, Gender, Bilirubin, SGOT, SGPT, Albumin, etc.- ML Models: Logistic Regression, Decision Tree, Random Forest, SVM, XGBoost- Top Model: Random Forest
2	Accuracy	Training Accuracy: 91.2% Validation Accuracy: 82.6% (Random Forest)
3	Fine Tuning Result (if done)	Validation Accuracy after fine-tuning: 84.3% <ul style="list-style-type: none">- Tuned parameters: n_estimators=200, max_depth=10, min_samples_split=4- Improved AUC: 0.89