Functional & Performance Testing Template

Model Performance Test

Date	21 June 2025
Team ID	LTVIP2025TMID60884
Project Name	Revolutionizing Liver care: Predicting Liver Cirrhosis using Advanced machine learning Techniques.
Maximum Marks	

Test Scenarios & Results

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
FT-01	Patient Input Validation (e.g., name, email, symptoms)	1.Open registration form 2. Enter invalid email and blank name 3. Submit form	Validation errors displayed, form not submitted	Validation messages shown correctly for invalid input	Pass
FT-02	Medical Record Input Validation (e.g., age, liver metrics)	1.Go to liver test input section 2. Enter negative values for ALT/AST 3. Submit	Form cannot be submitted with invalid/negative valuesNegative values	Negative values flagged with error messages	Pass
FT-03	Diagnosis Suggestion Generation	1.Upload liver test report or fill in values 2. Click “Predict” 3.Veiw results	ML model predicts cirrhosis risk level (e.g., High, Medium, Low) with accuracy	Risk prediction shown: “High Risk	Pass
FT-04	Email Confirmation after Registration	1.Register with valid email 2. Check inbox 3.Click confirmation link	User account gets activated after clicking confirmation link	Email link activates account successfully	Pass

PT-01	Model Accuracy Consistency (Validation vs Real-time input)	1.Input sample test values 2. Compare output against known labeled result	Model should match known output (or close to ground truth)	Model predicted correctly in 9 out of 10 known cases	Pass
PT-02	Performance Load Test for 100 simultaneous predictions	1.Simulate 100 users submitting prediction requests concurrently	Server handles all requests within response time limit (<5 seconds)	Average response time: 3.8 seconds under 100 concurrent requests	Pass
PT-03	Report Generation and Download	1.Submit prediction 2.Click “Generate Report” 3.Try downloading generated PDF	Report should be generated with risk score and key parameters, and should be downloadable	PDF report generated correctly and downloaded	Pass