

Functional & Performance Testing Template

Model Performance Test

Date	27 june2025
Team ID	LTVIP2025TMID59171
Project Name	HealthAI: Intelligent Healthcare Assistant Using IBM Granite
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	Text Input Validation (e.g., symptoms, name)	Enter valid and invalid symptoms or text in input fields (e.g., "fever", "@@##123")	Valid inputs accepted, errors for invalid ones		
FT-02	Number Input Validation (e.g., age, heart rate)	Enter realistic and extreme values (e.g., age 25 vs -5, BP 120 vs 500)	Accepts valid values, shows error for out-of-range		
FT-03	Disease Prediction Output	Enter symptoms and click "Predict"	Returns relevant diseases or "No disease detected"		
FT-04	AI Chat System	Ask a health-related question (e.g., "What to do for cold?")	AI responds accurately with health suggestions		
FT-05	Vitals Graph Rendering	View vitals dashboard with heart rate, BP, glucose trends	Graphs display correctly with labeled axes		
FT-06	API Key Authentication	Check with valid/invalid API keys	Valid key connects; invalid key gives error message		
FT-07	Email/OTP Confirmation	Try confirming a new account with email and OTP	Email/OTP sent and account verified		

Performance Testing Scenarios

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
PT-01	Disease Prediction Response Time	Use a stopwatch or log time taken for prediction after symptom input	Should respond in under 3 seconds		
PT-02	Chat API Load Test	Simulate 10+ users chatting with AI simultaneously	Chatbot remains responsive with no timeouts		
PT-03	Vitals Data Upload Load Test	Upload multiple vital logs (e.g., 50 records from Excel or sensors)	Upload and visualization should work without lag		
PT-04	Dashboard Load Performance	Open dashboard with multiple charts and recent health records	Loads within 2–3 seconds on stable network		
PT-05	Backend Model Throughput	Send 100 requests per minute to disease predictor API	No crashes, responses maintained under 5s		
PT-06	File Upload Resilience	Upload multiple reports (PDF, images) at once	All uploads complete without crashing the application		