

## Functional & Performance Testing

### Model Performance Test

Date	27 June 2025
Team ID	LTVIP2025TMID59561
Project Name	HealthAI: Intelligent Healthcare Assistant Using IBM Granite
Maximum Marks	

### Functional & Performance Testing Report – HealthAI

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, condition input, queries)	Enter valid and invalid health-related text in input fields (e.g., “fever”, “cold”)	Valid inputs accepted, errors shown for invalid or empty inputs	Valid text accepted, error shown for symbols and empty input	Pass
FT-02	Number Input Validation (e.g., age, vitals)	Enter valid and out-of-range values (e.g., age = -5, 200)	Accept valid range, reject invalid inputs	Out-of-range inputs flagged, correct range accepted	Pass
FT-03	Content Generation (Patient Chat, Treatment Plans, Predictions)	Provide sample inputs and generate response	Correct, contextual content generated for each input	Relevant AI-generated outputs shown based on patient data	Pass
FT-04	API Connection Check	Load .env with valid and invalid API key, test model connection	API should respond only when valid key is present	Invalid key returns error, valid key initiates model successfully	Pass
PT-01	Response Time Test	Measure time between request and AI-generated response	Response should be under 3 seconds	Avg: 2.4 seconds	Pass

<b>PT-02</b>	API Speed Test	Send multiple simultaneous symptom-based queries	API handles concurrency without timeout	API responded within limits under moderate load (5+ users)	Pass
<b>PT-03</b>	File Upload Load Test (Health Metrics CSV/JSON upload)	Upload multiple health logs in supported format	Files upload and process without crash	All test files processed successfully	Pass