# **Functional & Performance Testing Template**

**Model Performance Test**

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| Date | 19/05/2025 – 30/06/2025 |
| Team ID | LTVIP2025TMID31711 |
| Project Name | HealthAI: Intelligent Healthcare Assistant Using IBM Granite |
| Maximum Marks |  |

## **Test Scenarios & Results**

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| **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) | Enter valid symptoms like “fever and rash” and invalid ones like numbers or blank text | Valid inputs accepted, invalid inputs prompt warnings | Valid inputs accepted, invalid inputs cleared with error | ✅ Pass |
| FT-02 | **Number Input Validation** (e.g., height, weight) | Enter values in and outside valid range (e.g., negative or blank height/weight) | Accepts correct values, shows errors for invalid inputs | Accepts valid numbers, rejects invalid ones with alerts | ✅ Pass |
| FT-03 | **AI Response Generation** | Enter profile and symptoms, then click “Check Symptoms” or “Generate Treatment Plan” | Generates relevant diagnosis and suggestions | Watsonx responded with correct diagnosis and suggestions | ✅ Pass |
| FT-04 | **API Connection Check** | Verify if IBM Watsonx model responds using the correct API key | API responds with AI-generated text | Watsonx model connected and returned results successfully | ✅ Pass |
| PT-01 | **Response Time Test** | Use stopwatch/timer to measure response time from submission to output | Response under 3 seconds | Average response ~2.3 seconds | ✅ Pass |
| PT-02 | **API Speed Test (Concurrency)** | Trigger multiple API calls simultaneously (e.g., 3 users) | Model responds without major delay | Slight delay under load, still within 4 seconds | ✅ Pass |
| PT-03 | **File Upload Load Test** (not used) | Upload multiple PDFs and observe performance (if applicable) | Should not crash or slow down | ❌ Not applicable – No file upload feature in HealthAI | N/A |