# **Functional & Performance Testing Template**

**Model Performance Test**

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| Date | 06 July 2025 |
| Team ID | LTVIP2025TMID31943 |
| Project Name | Project - HealthAI: Intelligent Healthcare Assistant |
| Maximum Marks | 2 |

## **Test Scenarios & Results**

| **Test Case ID** | **Scenario (What to test)** | **Test Steps (How to test)** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| --- | --- | --- | --- | --- | --- |
| **FT-01** | Symptom Input Validation | Enter correct and incorrect symptom inputs | Valid symptoms accepted, errors shown for empty/invalid entries | System accepted valid entries and rejected blank or irrelevant inputs | Pass |
| **FT-02** | Health Metric Validation | Provide blood pressure outside normal ranges | Alerts shown for unusual metrics | Alert triggered with AI explanation | Pass |
| **FT-03** | Treatment Plan Generation | Submit a diagnosed condition + profile to generate plan | Personalized, structured treatment plan returned | Detailed plan generated using IBM Granite | Pass |
| **FT-04** | IBM API Connection | Use .env credentials to connect and request AI response | Model returns a valid, formatted response | Response successfully generated through Granite 13B | Pass |
| **PT-01** | Response Time Test | Record time from input submission to AI reply | Response received within 3 seconds | Avg. time observed ~2.3 seconds | Pass |
| **PT-02** | Simultaneous User Load Test | Multiple users trigger disease prediction at once | API continues responding without timeout | No crashes or bottlenecks; AI handled requests well | Pass |
| **PT-03** | Session Handling | Switch features while preserving state | Session data retained when navigating between tabs | Patient info and chat preserved correctly | Pass |