# **Functional & Performance Testing Template**

**Model Performance Test**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID30146 |
| Project Name | Garage management system |
| 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 (Customer Queries) | Enter valid and invalid service/repair queries in the Gradio UI | Valid inputs accepted, errors shown for empty/invalid | Works as expected | ✅ Pass |
| **FT-02** | Booking Date Validation | Input booking dates in the past or invalid formats | Accepts valid dates, shows error for past/invalid | Works as expected | ✅ Pass |
| **FT-03** | AI Response Generation (Troubleshooting) | Provide a vehicle issue description and click "Generate" | Generates relevant repair suggestions or maintenance advice | Satisfactory, context-aware outputs | ✅ Pass |
| **FT-04** | API Connection Check (IBM Granite) | Verify model loads and responds to prompts | Model loads successfully, responds in expected format | Successfully executed | ✅ Pass |
| **FT-05** | Salesforce Integration Test | Save AI-generated service notes to Salesforce record | Record saved successfully in correct customer profile | Works as expected | ✅ Pass |
| **PT-01** | Response Time Test | Measure time from query to AI output | Response generated in < 3 seconds | ~2.4 seconds average | ✅ Pass |
| **PT-02** | Concurrent User Load Test | Simulate multiple mechanics/customers using system | No slowdown or crash during simultaneous usage | No lag observed | ✅ Pass |
| **PT-03** | Booking Database Stress Test | Create 500+ dummy booking entries | System handles without performance drop | Works smoothly | ✅ Pass |
| **PT-04** | Inventory Query Speed Test | Request multiple parts availability checks | Instant results with no timeout | Works as expected | ✅ Pass |