**Functional & Performance Testing Template**

**Model Performance Test**

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| **Date** | **25 June 2025** |
| **Team ID** | **LTVIP2025TMID37165** |
| **Project Name** | **Citizen AI – Intelligent Citizen Engagement Platform.** |
| **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., queries) | Enter various citizen queries (valid and gibberish text) | Valid queries are processed; invalid entries return validation msg | Valid entries answered; invalid entries trigger error messages | Pass |
| **FT-02** | Number Input Validation (e.g., age) | Enter correct and incorrect age formats (e.g., -1, 200, abc) | Accepts realistic ages; errors for invalid formats or out-of-range | Proper error handling for all invalid cases | Pass |
| **FT-03** | Content Generation (advice, procedures) | Ask for government scheme info or help on documentation | Relevant and contextual content generated | Content aligns with context and request | Pass |
| **FT-04** | API Connection Check | Simulate API call to backend databases (e.g., MyGov) | API should return response or error within limit | API responds correctly; error messages shown on failure | Pass |
| **FT-05** | Multi-language Support | Input in Hindi, English, and regional languages | System should identify and respond appropriately in the same language | Supports English, Hindi well; minor issues with regional dialects | Partial Pass |
| **FT-06** | Chat Context Memory | Ask follow-up question without repeating context | System should maintain conversation context | Context retained for at least 5 exchanges | Pass |

**Performance 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** |
| **PT-01** | Response Time Test | Measure response time for standard question | Response within 3 seconds | Avg. response time: 2.2 sec | Pass |
| **PT-02** | API Speed Test | Simultaneously fire 100 user queries via API | API should scale and not lag | Minor delay at 100 concurrent users | Pass |
| **PT-03** | File Upload Load Test | Upload 10 PDFs (citizen documents) simultaneously | No crash; fast processing | Handled smoothly; max 5s wait time | Pass |
| **PT-04** | Memory Usage During Peak Load | Monitor memory while 50 users engage in back-to-back chats | Memory usage should not exceed 70% | Peaked at 64% memory | Pass |