**Functional & Performance Testing Template**

**Model Performance Test**

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| Date | 21 February 2025 |
| Team ID | PNT2022TMID32100 |
| Project Name | Citizen AI |
| 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** | User Query Input Validation | Enter both valid and irrelevant/empty questions in the chatbot input | Valid civic queries accepted, invalid ones handled gracefully | Valid queries like "water issue" processed; blanks show fallback message | Pass |
| **FT-02** | Issue Reporting Input Validation *(Planned)* | Enter location/description with empty or incorrect format | Accept valid data; reject empty fields or incorrect formats | Not implemented in MVP; placeholder logic exists | Fail |
| **FT-03** | AI Response Generation | Type a complete user query and click submit | Relevant answer based on Granite model | Accurate responses returned for civic and government scheme queries | Pass |
| **FT-04** | IBM Granite API Connection | Use correct API/model ID and test connection | Successfully connects and returns model-generated output | API integration with ibm-granite/granite-3.3-2b-instruct works as expected | Pass |
| **PT-01** | |  | | --- | |  |  |  | | --- | | Chat Response Time Test | | Time the delay after user submits query | Model should respond in under 3–5 seconds | Average response time: 2.7–4.2 seconds (on T4 GPU Colab) | Pass |
| **PT-02** | Concurrent API Request Speed | Send multiple queries at once (simulate via code/threads) | Model should remain responsive without lag | Handled up to 8–10 parallel requests without major delay | Pass |
| **PT-03** | Gradio Frontend Load Test | Load Gradio UI and simulate multiple users using multiple browser tabs | Should remain stable without crashing | Gradio UI remained stable and responsive during light concurrent use | Pass |