Functional & Performance Testing Template

Model Performance Test

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID32045 |
| Project Name | |  | | --- | | EduTutor AI: Personalized Learning  with Generative AI and LMS Integration | |
| 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., concept/topic) | Enter valid topics like “Generative AI” and invalid entries like “123##” | Valid topics are accepted; invalid inputs trigger error messages | Validated successfully | ✅ Pass |
| FT-02 | Number Input Validation (e.g., quiz count) | Enter quiz count from 1 to 10, and test invalid like -1 or 100 | Accepts values 1–10; shows error for out-of-range values | Working as expected | ✅ Pass |
| FT-03 | Content Generation (concepts/quizzes) | Provide a topic and generate explanation/quiz | AI generates relevant and grammatically correct content | Accurate output generated | ✅ Pass |
| FT-04 | API Connection Check | Connect using Hugging Face API token and load IBM Granite model | Model loads and responds without authentication error | Model loaded successfully | ✅ Pass |
| PT-01 | Response Time Test | Measure time to generate content using a stopwatch | Responses should return within 3 seconds | Returned in ~2.2 seconds | ✅ Pass |
| PT-02 | API Speed Test | Trigger 5 quiz generations at once using different users | All responses returned without delay | No lag or delay noticed | ✅ Pass |
| PT-03 | File Upload Load Test (PDF processing) | Upload large and multiple PDFs for test generation | No crash or lag during PDF reading and question generation | System handled it smoothly | ✅ Pass |