

## Functional & Performance Testing Template

### Model Performance Test

Date	30 june 2025
Team ID	LTVIP2025TMID38204
Project Name	<b>Edututor AI: PERSONALIZED LEARNING WITH GENERATIVE AI And LMS INTEGRATION</b>
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	<b>Student Query Input Validation</b>	Submit both valid (e.g., "Explain photosynthesis") and invalid (e.g., empty text, numeric only) queries via LMS chat interface	Valid inputs accepted; invalid inputs yield clear error messages		
FT-02	<b>Parameters Input Validation</b> (e.g., quiz length, slide count)	Enter numeric values within (e.g., 10–20) and outside (e.g., -5 or 1000) allowed range	Within-range accepted; out-of-range flagged with error message		
FT-03	<b>Personalized Content Generation</b>	Send a complete student profile (topic, proficiency level) and click “Generate Lesson”	A lesson plan/quiz/video tailored to the topic and student level is returned		
FT-04	<b>LMS-API Connection Check</b>	Simulate invalid API key and observe integration behavior	Error handled gracefully; UI shows guidance on correcting API key		

<b>PT-01</b>	<b>Response Time Test</b>	Use stopwatch when generating personalized recommendation or quiz	Generation time $\leq 3$ seconds for standard payloads
<b>PT-02</b>	<b>Concurrent API Load Test</b>	Send 10 simultaneous requests to generate content	All requests succeed under SLA; no significant degradation
<b>PT-03</b>	<b>Document Upload &amp; Analysis Load Test</b>	Upload multiple PDFs (e.g., lecture notes); request summary or quiz	System processes all documents; generates accurate summary/assessment without crashes

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
<b>FT-01</b>	Text Input Validation (e.g., topic, job title)	Enter valid and invalid text in input fields	Valid inputs accepted, errors for invalid inputs		
<b>FT-02</b>	Number Input Validation (e.g., word count, size, rooms)	Enter numbers within and outside the valid range	Accepts valid values, shows error for out-of-range		
<b>FT-03</b>	Content Generation (e.g., blog, resume, design idea)	Provide complete inputs and click "Generate"	Correct content is generated based on input		
<b>FT-04</b>	API Connection Check	Check if API key is correct and model responds	API responds successfully		
<b>PT-01</b>	Response Time Test	Use a timer to check content generation time	Should be under 3 seconds		
<b>PT-02</b>	API Speed Test	Send multiple API calls at the same time	API should not slow down		

<b>PT-03</b>	File Upload Load Test (e.g., PDFs)	Upload multiple PDFs and check processing	Should work smoothly without crashing		
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