Functional & Performance Testing Template

Model Performance Test

Date	26 June 2025
Team ID	LTVIP2025TMID33995
Project Name	EDUTUTOR AI – Personalized AI-Powered
	Learning Platform
Maximum Marks	

Test Scenarios & Results

Test Case	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
FT-01	Text Input Validation (topic selection, quiz prompts)	valid/invalid	Accepts valid input, rejects empty or invalid ones	Valid topics accepted; error shown for empty inputs	Pass
FT-02	Number Input Validation (number of quiz questions)	Enter numbers like 5, 10, 0, -1, 100	Accepts values between 1–20, shows error otherwise	Values <1 and >20 rejected correctly	Pass
FT-03	Quiz Generation via IBM WatsonX API	Provide valid input, click "Generate Quiz"	Returns a well- structured JSON with MCQs	MCQs generated as JSON from IBM Granite model	✓ Pass
FT-04	Pinecone Upsert and Query Test	Submit quiz and retrieve from Pinecone	Data stored and retrieved successfully	Quiz history stored & retrieved from Pinecone vector DB	✓ Pass
FT-05	Google Login Functionality	Login via Google, verify with dummy credentials	Redirects and logs user in successfully	Google OAuth login works; tokens retrieved	Pass
FT-06	Streamlit UI Navigation (Student & Educator Panels)	Click through all dashboard links and buttons	Each button works, panels display properly	All buttons and dashboards functioned as expected	✓ Pass
PT-01	Quiz Generation Time	Use timer from click to WatsonX response	Should be under 3–5 seconds	Average time = 2.4 seconds	✓ Pass

Test Case	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
PT-02	API Concurrency Handling	Send multiple quiz requests at once	All respond correctly without delay or error	Handled 10+ requests without timeout	✓ Pass
PT-03	Pinecone Vector Load Test	Push 100+ quiz vectors for storage	Handles smoothly without timeouts or crashes	150 vectors stored; system remained stable	✓ Pass
PT-04	Google Login for 10+ Users Simultaneously	Simulate concurrent logins	App authenticates all without error	12 concurrent logins processed without error	✓ Pass