Functional & Performance Testing Template

Model Performance Test

Date	27 June 2025
Team ID	LTVIP2025TMID29152
Project Name	SmartSDLC – AI-Enhanced Software Development Lifecycle
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	Code Input Validation (for AI Code Generator)	Enter valid/invalid text describing a code task	Valid task accepted, invalid input throws error	Valid tasks accepted and invalid inputs show "Invalid task" warning	Pass
FT-02	Language Selection / Detection (multi-language support)	Enter task in different languages or explicitly select one	AI generates code in appropriate language	Correct language detected and code generated accordingly	Pass
FT-03	Code Generation Accuracy	Provide sample tasks and compare generated output	Output matches expected logic/function	Code output matches expected structure and functionality	Pass
FT-04	Bug Fixing Logic	Input buggy code and check the result	Fixed code returned, preserving original functionality	AI fixed syntax and logical bugs correctly	Pass

FT-05	Test Case Generation	Provide a function/module and trigger test case generation	Unit test cases are generated based on the function	Unit test cases created for boundary and valid inputs	Pass
FT-06	File Upload Functionality (PDFs for Classification)	Upload valid/invalid PDF files	PDFs processed and classified without error	Successfully classified requirements and design content	Pass
FT-07	Login & Session Handling	Attempt login with valid/invalid credentials	Successful login, proper error for invalid credentials	Valid users logged in; errors shown for wrong credentials	Pass
PT-01	AI Response Time (e.g., for code generation)	Measure time from prompt to output	Response generated in under 5 seconds	Average time was 2.4 seconds	Pass
PT-02	Multi-user Load Test (simulate 5 users at once)	Open multiple browser tabs/sessions and submit different tasks	Server responds without slowing down	All 5 users got responses in under 5 seconds	Pass
PT-03	PDF Upload Load Test	Upload 4–5 PDFs simultaneously	No crash; each file processed correctly	All files uploaded, parsed, and classified smoothly	Pass
PT-04	API Reliability Test	Send 20 API calls rapidly using a loop	Each call returns a valid result without server failure	All 20 calls returned results without timeout or crash	Pass