

Functional & Performance Testing Template

Model Performance Test

Date	25 JUNE 2025
Team ID	LTVIP2025TMID59527
Project Name	Smart SDLC- AI Enhnced Software Development LifeCycle
Maximum Marks	

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/ Fail
FT-01	Prompt Input Validation	Enter valid/invalid text in prompt fields	Valid input accepted, error shown for empty/invalid input		
FT-02	PDF Upload & Extraction	Upload supported/unsupported PDFs	Text successfully extracted from valid PDFs		
FT-03	Requirement Analysis O/P	Enter prompt or upload doc and click "Analyze"	Functional, NFRs, user stories are generated accurately		
FT-04	Code Generation (Language + Framework)	Select language, enter feature prompt, and generate code	Code generated with comments and correct logic		
FT-05	Test Case Generation from Requirements/Code	Provide code or feature description	Relevant and structured test cases generated		
FT-06	AI Assistant (Q&A)	Ask SDLC-related query	Response should be accurate, helpful, and business-focused		
PT-01	Model Response Time	Measure time taken for code/test/req generation	Response within 3–5 seconds (on GPU)		
PT-02	File Upload Load Test	Upload multiple PDFs in sequence	App should not crash; performance remains stable		
PT-03	Concurrent Prompt Handling	Send multiple requests (in tabs or sessions)	No API slowdowns or app hangs		
PT-04	Memory & Resource Usage	Monitor app on long usage (multiple modules used)	Stable RAM/CPU usage; no leaks or hangs		