Functional & Performance Testing Template

Model Performance Test

Date	26June 2025
Team ID	LTVIP2025TMID32004
Project Name	SmartSDLC: AI-Enhanced Software Development Lifecycle
Maximum Marks	2

Test Scenarios & Results

Test Case ID	Scenario (What to test)	Test Steps (How to test)	Expected Result	Actual Result	Pass/Fail
FT-01	Requirement Document Upload	Upload correct and corrupted requirement PDFs	Valid PDFs parsed; errors shown for invalid files	System extracted text from valid PDFs and rejected unreadable files	Pass
FT-02	Requirement Classification	Upload requirements and trigger classification	Requirements grouped under SDLC phases accurately	Text successfully classified into SDLC phases using Watsonx	Pass
FT-03	AI Code Generation	Enter prompt for Python function logic	Returns working code without markdown or irrelevant content	Returned valid Python code as per input prompt	Pass
FT-04	Watsonx Model API Connection	Use credentials to call Watsonx model	Valid response from model using Granite-3-3-8b-instruct	API connected and generated AI output	Pass
PT-01	Code Generation Response Time	Record time from prompt to code output	Response generated within 4 seconds	Avg. time observed ~2.7 seconds	Pass
PT-02	Concurrent Users Test	Multiple users upload and process SDLC tasks simultaneously	Application handles requests without crashing or delay	Handled load efficiently; no crashes	Pass
PT-03	Session State Handling	Switch modules while preserving session inputs	Inputs retained when navigating modules	Maintained chat and text input history	Pass