

Functional & Performance Testing Template

Model Performance Test

Date	28 February 2026
Team ID	LTVIP2026TMIDS46423
Project Name	Intelligent SQL Querying with LLMs Using Gemini Pro
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	Natural Language Input Validation	Enter valid query ("Show all employees") and invalid query (empty input)	Valid input accepted, empty input shows error	System validates input correctly	Pass
FT-02	SQL Generation Accuracy	Enter structured natural language query	Correct SQL query generated	SQL matches user intent	Pass
FT-03	SQL Validation Check	Enter ambiguous or harmful query (e.g., delete all records)	Destructive queries blocked	Restricted keywords blocked	Pass
FT-04	Database Execution	Generate SQL and execute on database	Correct results displayed in tabular format	Results displayed correctly	Pass
FT-05	API Connection Check	Check API key configuration and send query	OpenAI API responds successfully	API integration working	Pass
PT-01	Response Time Test	Measure time from input submission to result display	Should be under 5 seconds	Avg 2–4 seconds	Pass
PT-02	Concurrent Request Test	Send multiple queries simultaneously	System handles moderate load	No crash under normal load	Pass
PT-03	Large Query Handling	Execute complex query with joins	System processes without failure	Slight delay but successful	Pass

PT-04	API Stress Test	Send repeated API calls	API maintains stable response	Stable under test conditions	Pass
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