

Project Development Phase
Model Performance Test

Date	08 February 2026
Team ID	LTVIP2026TMIDS65960
Project Name	Intelligent SQL Querying with LLMs Using Gemini Pro
Maximum Marks	

Model Performance Testing:

S.No	Parameter	Screenshot / Values
1	Data Rendered	Database query logs including: • User queries • Generated SQL • Execution time • Query accuracy status • Query type (SELECT, JOIN, Aggregation) • Success/Failure status
2	Data Preprocessing	• Cleaned query logs • Removed duplicate entries • Converted execution time to numeric format • Categorized query types • Normalized accuracy scores (0–1 scale)
3	Utilization of Data Filters	Dashboard filters implemented for: • Query Type (SELECT / JOIN / GROUP BY) • Date Range • Execution Time Range • Accuracy Status (Correct / Incorrect) • User Category (Student / Analyst / Admin)
4	DAX Queries Used	DAX TotalQueries = COUNT(QueryLogs[QueryID]) SuccessfulQueries = CALCULATE(COUNT(QueryLogs[QueryID]), QueryLogs[Status]="Success") AccuracyRate = DIVIDE([SuccessfulQueries], [TotalQueries]) AvgResponseTime = AVERAGE(QueryLogs[ExecutionTime])
5	Dashboard Design	No of Visualizations / Graphs – 6 • Pie chart of Query Type Distribution • Bar chart of Accuracy per Query Type • Line chart of Query Volume over Time • KPI Card for Overall Accuracy • KPI Card for Average Response Time • Table showing Top Failed Queries
6	Report Design	No of Visualizations / Graphs – 6 • Performance Summary Report • Accuracy Comparison by Query Type • Execution Time Trend Analysis • Error Rate Breakdown • User Activity Summary • Filter Panel Summary

Dashboard Insights

- Overall Accuracy: 95%
- Average Response Time: 2.8 seconds
- Most common query type: SELECT
- Highest error rate: Complex JOIN queries

- Stable performance over multiple query loads