**Project Development Phase**
**Model Performance Test**

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| Date | 08 February 2026 |
| Team ID | LTVIP2026TMIDS86338 |
| 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<br>TotalQueries = COUNT(QueryLogs[QueryID])<br><br>SuccessfulQueries = CALCULATE(COUNT(QueryLogs[QueryID]), QueryLogs[Status]="Success")<br><br>AccuracyRate = DIVIDE([SuccessfulQueries], [TotalQueries])<br><br>AvgResponseTime = AVERAGE(QueryLogs[ExecutionTime])<br> |
| 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