

Project Design Phase
Problem – Solution Fit Template

Date	27 February 2026
Team ID	LTVIP2026TMIDS66231
Project Name	IntelliSQL: Intelligent SQL Querying with LLMs using Gemini Pro
Maximum Marks	4 marks

Problem – Solution Fit Template:

IntelliSQL addresses the critical problem of complex SQL query writing, which remains a significant barrier for non-technical users seeking insights from relational databases. Business analysts, researchers, and domain experts often depend on data engineers to retrieve information, creating bottlenecks and delays. Additionally, even experienced developers face challenges writing optimized, accurate SQL queries for complex schemas. IntelliSQL leverages Gemini Pro, a state-of-the-art large language model, to intelligently translate natural language questions into precise SQL queries, enabling anyone to interact with databases conversationally.

Purpose:

- ❑ To enable non-technical users to query relational databases using plain English without writing SQL.
- ❑ To leverage Gemini Pro LLM for accurate, context-aware natural language to SQL translation.
- ❑ To reduce dependency on data engineers and accelerate data-driven decision making.
- ❑ To generate optimized, schema-aware SQL queries with explanations for any relational database.

Template:

