

Project Design Phase
Solution Architecture

Date	19 February 2026
Team ID	LTVIP2026TMIDS60653
Project Name	IntelliSQL: Intelligent SQL Querying with LLMs Using Gemini Pro
Maximum Marks	4 Marks

Solution Architecture:

It is a structured and multi-stage process that bridges the gap between business data needs and intelligent technology solutions. In *IntelliSQL: Intelligent SQL Querying with LLMs Using Gemini Pro*, the solution architecture is designed to translate natural language questions into accurate SQL queries using Large Language Models. Its goals are to:

- Identify the most effective AI-driven approach to solve the problem of complex database querying for non-technical users.
- Describe the structure, behavior, and functional components of the IntelliSQL system to all project stakeholders.
- Define system features such as natural language processing, SQL generation, query execution, and result visualization.
- Provide technical specifications and design guidelines according to which the system is developed, managed, and delivered.

Example - Solution Architecture Diagram:

