

Project Design Phase
Proposed Solution Template

Date	20 February 2026
Team ID	LTVIP2026TMIDS52185
Project Name	Intelligent SQL Querying with LLMs Using Gemini Pro
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No	Parameter	Description
1	Problem Statement	Users face difficulty writing SQL queries due to complexity of syntax and database structure. Non-technical users cannot easily access database information.
2	Idea / Solution Description	Intelli SQL is an AI-powered system that converts natural language questions into SQL queries using Gemini Pro. Users type English queries and the system generates, validates, and executes SQL automatically.
3	Novelty / Uniqueness	Combines Large Language Models with database querying to enable conversational SQL generation instead of manual coding. Uses prompt engineering for structured SQL output.
4	Social Impact / Customer Satisfaction	Makes database access easy for students and non-technical users. Improves productivity and reduces dependency on experts. Enhances confidence and user satisfaction.
5	Business Model	Freemium model — free basic querying, premium features for advanced optimization, enterprise DB integration, analytics dashboards, and API usage.
6	Scalability	Can be extended to MySQL, PostgreSQL, SQL Server, cloud deployment, multi-user support, and enterprise analytics integration.