Project Design Phase
Solution Architecture

Date	15 February 2025
Team ID	LTVIP2026TMIDS87048
Project Name	Intelligent SQL Querying with LLMs Using Gemini
Maximum Marks	4 Marks

Solution Architecture:

The solution architecture defines how the system transforms user questions into executable SQL queries using a Large Language Model. Its goals are to:

• Provide an intuitive interface for users to ask questions in natural language.
• Use the Gemini LLM to translate user input into valid SQLite SQL queries.
• Execute generated queries securely on the database and return results.
• Ensure accuracy, performance, and reliability of query generation.
• Define clear interaction between UI, LLM engine, and database layer.
• Support extensibility for additional databases and advanced query logic.

Example - Solution Architecture Diagram: