

Project Design Phase-II

Data Flow Diagram & User Stories

Date	31 January 2025
Team ID	LTVIP2026TMIDS87048
Project Name	Intelligent SQL Querying with LLMs Using Gemini
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) illustrates how data moves through the *Intelligent SQL Querying with LLMs Using Gemini* system. It represents how user questions are processed, how the LLM generates SQL queries, how the database executes them, and how results are returned to the user. The diagram highlights the interaction between the user interface, Gemini model, SQL generator logic, and database.

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
End User	Ask Questions in Natural Language	USN-1	As a user, I can enter my question in plain English instead of writing SQL queries.	User can type questions in an input box.	High	Sprint-1
		USN-2	As a user, I can generate an SQL query automatically from my question.	System converts text into valid SQL.	High	Sprint-1
		USN-3	As a user, I can execute the generated SQL query on the database.	Clicking button runs query without errors.	High	Sprint-1
		USN-4	As a user, I can view query results in a readable format.	Results displayed in table/list format.	High	Sprint-1
		USN-5	As a user, I can see the generated SQL query for learning purposes.	Generated SQL visible on screen.	Medium	Sprint-2

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Administrator		USN-6	As an admin, I can manage database records.	Database updates reflect in queries.	Medium	Sprint-2
		USN-7	As an admin, I can ensure correct schema for LLM interaction.	System works with defined table structure.	Medium	Sprint-2
System	Query Intelligence	USN-8	System should validate SQL queries before execution.	Invalid queries handled safely.	High	Sprint-1
		USN-9	System should handle LLM response errors gracefully.	User receives clear error messages.	High	Sprint-1