

## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	28 February 2026
Team ID	LTVIP2026TMIDS46423
Project Name	Intelligent SQL Querying with LLMs Using Gemini Pro
Maximum Marks	4 Marks

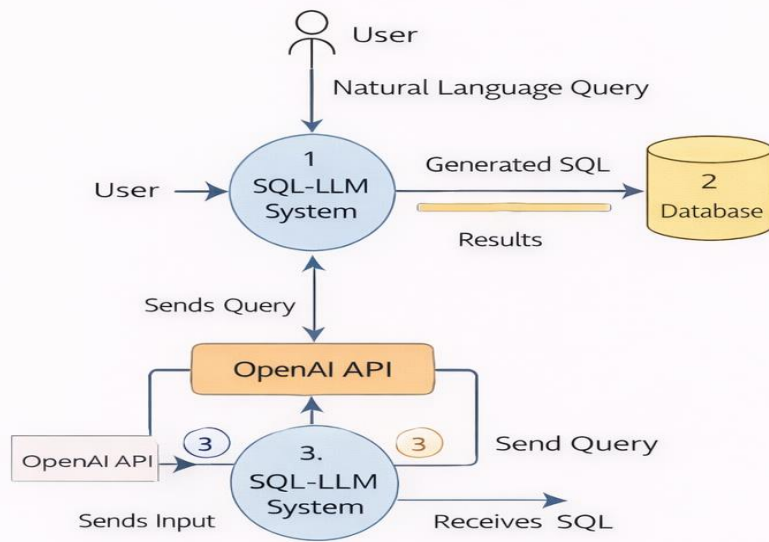
#### Data Flow Diagrams:

A Data Flow Diagram (DFD) is a visual representation of the flow of information within a system. It shows:

- How data enters the system
- How it is processed
- Where it is stored
- How it leaves the system

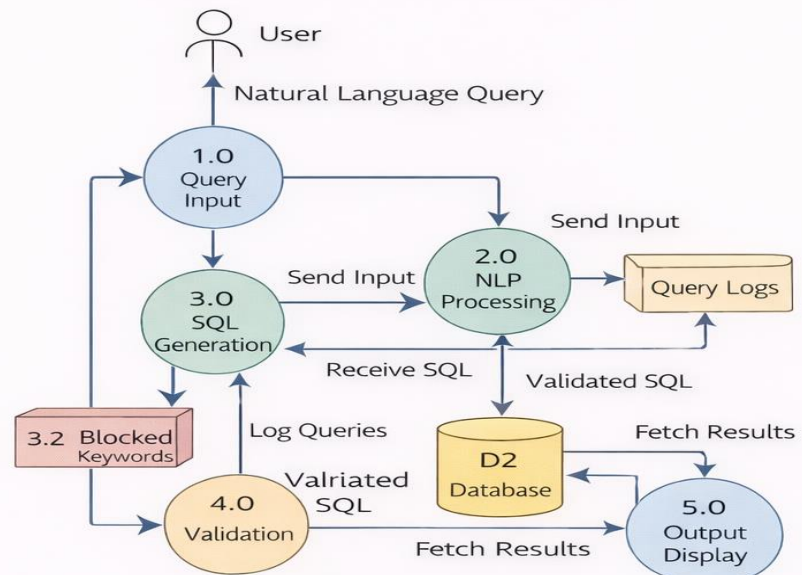
For the SQL-LLM system, DFD illustrates how natural language input is converted into SQL and executed on a database.

**DFD Level 0 (Context Diagram)**



**DFD Level 0 (Context Diagram)**

**DFD Level 1 (Detailed Flow)**



**DFD Level 1 (Detailed Flow)**

## 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
Business Analyst	Query Input	USN-1	As a user, I can enter natural language queries to retrieve data	System converts query to SQL	High	Sprint-1
Business Analyst	SQL Generation	USN-2	As a user, I want the system to generate accurate SQL queries	Generated SQL matches intent	High	Sprint-1
Business Analyst	Result Display	USN-3	As a user, I can view results in tabular format	Data displayed correctly	High	Sprint-1
Administrator	Query Monitoring	USN-4	As an admin, I can view query logs	Logs stored and accessible	Medium	Sprint-2
System	Security	USN-5	As a system, I must prevent destructive SQL queries	Restricted keywords blocked	High	Sprint-1
Business Analyst	Error Handling	USN-6	As a user, I receive meaningful error messages	Clear error displayed	High	Sprint-1
Manager	Performance	USN-7	As a manager, I want fast responses	Response time < 5 sec	Medium	Sprint-2