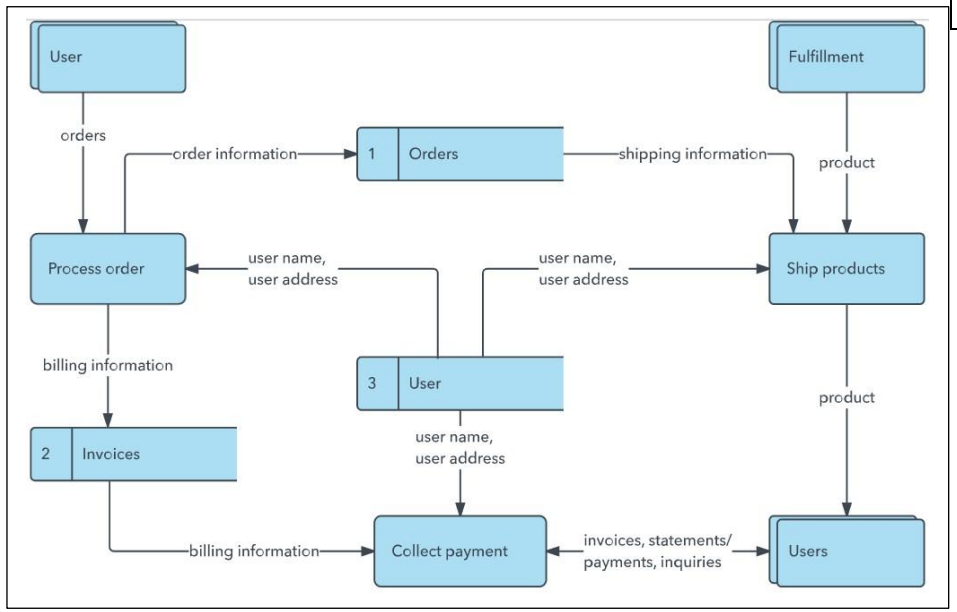
Project Design Phase-II
Data Flow Diagram & User Stories

Date	08 February 2026
Team ID	LTVIP2026TMIDS44479
Project Name	Intelligent SQL Querying with LLMs Using Gemini Pro
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) represents how data flows within the Intelli SQL system. It shows how user input is processed using Gemini Pro, converted into SQL queries, executed on the database, and how results are returned.

Example : DFD level 0 (Industrial Standard)



Example: (Simplified)

DFD Level 0 (Context Diagram)

External Entity: User
Main Process: Intelli SQL System

Data Flow:
1.User enters Natural Language Query
2.System sends request to Gemini Pro
3.SQL Query Generated
4.Query executed on Database
5.Results returned to User

DFD Level 1 (Detailed Flow)

1. User Interface Module – Accepts input and displays results.
2. LLM Processing Module (Gemini Pro) – Converts natural language to SQL.
3. Query Validation Module – Checks syntax and prevents SQL injection.
4. Database Module – Executes SQL query.
5. Response Formatter – Displays readable results to the user.

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
Customer (Web User)	Registration	USN-1	Register using email & password	User can create account and login	High	Sprint-1
Customer (Web User)	Login	USN-2	Login using credentials	Dashboard loads successfully	High	Sprint-1
Customer (Web User)	Natural Language Query	USN-3	Enter natural language to generate SQL	System generates accurate SQL query	High	Sprint-1
Customer (Web User)	Query Execution	USN-4	Execute generated SQL query	Query runs and displays results	High	Sprint-1
Customer (Web User)	Query Explanation	USN-5	View explanation of SQL query	Query explained in simple English	Medium	Sprint-2
Administrator:						
User Type	**Epic**	**User Story No**	**User Story**	**Acceptance Criteria**	**Priority**	**Release**
Administrator	Database Management	USN-6	Manage database schema	Schema updates successfully	High	Sprint-1

Administrator	User Management	USN-7	View and manage users	Admin can monitor users	Medium	Sprint-2