

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	24 February 2026
Team ID	LTVIP2026TMIDS34458
Project Name	Intelligent SQL Querying with LLMs using Gemini Pro
Maximum Marks	4 Marks

#### Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

#### Step-1: Team Gathering, Collaboration and Select the Problem Statement

The screenshot shows the 'Template' section of the Mural interface. On the left, there's a sidebar with a blue vertical bar containing the word 'Template'. The main area has three columns. The first column contains a circular icon with a lightbulb and wavy lines, followed by the title 'Brainstorm & idea prioritization'. Below the title, it says: 'Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.' It also lists preparation time: '10 minutes to prepare', '1 hour to collaborate', and '2-8 people recommended'. The second column starts with a step titled 'Before you collaborate' with a duration of '10 minutes'. It includes sections for 'Team gathering' (defining participants and sending invites), 'Set the goal' (thinking about the problem), and 'Learn how to use the facilitation tools' (using Facilitation Superpowers). The third column starts with a step titled 'Define your problem statement' with a duration of '5 minutes'. It includes a 'PROBLEM' box asking 'How might we help users get data from a database without needing to know SQL?'. At the bottom right of the main area, there's a box titled 'Key rules of brainstorming' with six rules: Stay in topic, Encourage wild ideas, Defer judgment, Listen to others, Go for volume, and If possible, be visual.

## Step-2: Brainstorm, Idea Listing and Grouping

**2 Brainstorm**

Write down any ideas that come to mind that address your problem statement.

⌚ 10 minutes

**TIP**: You can select a sticky note and tap the pencil icon to start editing.

**Person 1**

- Ask questions in English instead of SQL
- Convert user question to SQL automatically
- Show query results in table format

**Person 2**

- Use AI (Gemini Pro) to generate SQL
- Avoid writing complex SQL queries
- Make database access easy

**Person 3**

- Explain results in simple language
- Show both SQL query and output
- Help beginners understand data

**Person 4**

- Single input box for user question
- Display results clearly
- Simple web interface using Streamlit

**Person 5**

- Support SELECT queries only for safety
- Prevent SQL injection
- Validate generated SQL

**3 Group ideas**

⌚ 20 minutes

**Group 1: Natural Language Querying**

- Ask questions in plain English
- No need to write SQL
- Biggest productivity提升

**Group 2: AI-Based SQL Generation**

- Use Gemini Pro for SQL generation
- Convert text to SQL automatically
- Intelligent query understanding

**Group 3: Database Execution & Safety**

- Execute SELECT queries only
- Print SQL execution
- Safe query validation

**Group 4: User Interface & Experience**

- Simple Streamlit web interface
- Single input field for questions
- Clear display of results

**Group 5: Data Understanding**

- Show query results in tables
- Explain output in simple language
- Improve data understanding

**Group 6: Error Handling & Schema Awareness**

- Understand database schema
- Handle weird or unclear queries
- Show helpful error messages

**Group 7: Future Enhancements**

- Multi-database support
- CSV/Excel upload
- Export results

**Group 8: Project Benefits**

- Useful for non-technical users
- Saves time
- Improves productivity

**TIP**: Add customer tags to these notes to make it easier to find. Insert, replace, and remove tags as the needs change over time!

## Step-3: Idea Prioritization

**4 Prioritize**

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⌚ 20 minutes

**TIP**: If you have multiple ideas in one quadrant, consider using sticky notes to separate them. Then, use the arrow keys to move them around the grid.

Importance		Feasibility		
+	-	+	-	
+High Importance	+High Feasibility	<b>Most Important</b>		
+High Importance	+Low Feasibility	Natural language to SQL conversion	Use Gemini Pro for SQL generation	
-High Importance	+High Feasibility	Multi-database support	Automatic query optimization	Conversational query handling
-High Importance	-Low Feasibility	UI color customization	Showing SQL query syntax	Basic result formatting
- Low Importance		Voice-based querying	Auto dashboard generation	Real-time analytics

Regardless of their importance, reflect back on the measure of time, effort, complexity, etc.