

## Project Planning Phase

### Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	24 February 2026
Team ID	LTVIP2026TMIDS34458
Project Name	Intelligent SQL Querying with LLMs using Gemini Pro
Maximum Marks	5 Marks

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	User Interface Setup	USN-1	As a user, I can open the IntelliSQL web application and view the query input interface.	2	High	Ajay
Sprint-1	User Interface Setup	USN-2	As a user, I can enter a natural language query into the system.	1	High	Anitha
Sprint-1	SQL Generation	USN-3	As a user, I want my natural language query to be converted into SQL using Gemini Pro.	3	High	Anjali
Sprint-1	Query Validation	USN-4	As a user, I want the system to validate the generated SQL to allow only SELECT queries.	2	High	Arshya
Sprint-1	Login (Optional Feature)	USN-5	As a user, I can log into the application using email and password.	1	Medium	Bhargavi

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Query Execution	USN-6	As a user, I want the generated SQL query to be executed on the database.	2	High	Ajay
Sprint-2	Results Display	USN-7	As a user, I can view the query results in a tabular format.	2	High	Anitha
Sprint-2	Result Explanation	USN-8	As a user, I can see a simple explanation of the query results.	3	Medium	Anjali
Sprint-2	Dashboard	USN-9	As a user, I can access a dashboard to submit multiple queries.	5	Medium	Arshiya
Sprint-2	Error Handling	USN-10	As a user, I receive meaningful error messages for invalid queries.	3	Medium	Bhargavi

#### Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	15	6 Days	01 Feb 2026	06 Feb 2026	15	06 Feb 2026

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-2	15	6 Days	08 Feb 2026	13 Feb 2026	15	13 Feb 2026

### Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

### Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

**Reference:**

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>