

## Project Planning Phase

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

Date	08 February 2026
Team ID	LTVIP2026TMIDS86338
Project Name	IntelliSQL: 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	Authentication & DB Setup	USN-1	User registration and login module	3	High	5
Sprint-1	Authentication & DB Setup	USN-2	Secure database connection (MySQL/PostgreSQL)	5	High	5
Sprint-1	Authentication & DB Setup	USN-3	Display database schema and tables	5	Low	5
Sprint-1	UI Development	USN-4	Dashboard for entering natural language queries	7	Medium	5
Sprint-2	NL to SQL Engine	USN-5	Convert natural language to SQL using Gemini Pro	8	High	5
Sprint-2	Query Processing	USN-6	Validate generated SQL queries	5	High	5
Sprint-2	Query Execution	USN-7	Execute SQL and display results	5	High	5

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Error Handling	USN-8	Provide meaningful error messages	2	Medium	5
Sprint-3	Optimization	USN-9	Optimize generated SQL queries	6	Medium	5
Sprint-3	Visualization	USN-10	Display results in charts/graphs	6	Medium	5
Sprint-3	History Feature	USN-11	Maintain query history	4	Low	5
Sprint-3	Security	USN-12	Prevent SQL injection and secure execution	4	High	5
Sprint-4	Testing	USN-13	Unit and integration testing	6	High	5
Sprint-4	Performance Testing	USN-14	Test system with large datasets	5	Medium	5
Sprint-4	Deployment	USN-15	Deploy application on cloud/local server	5	High	5
Sprint-4	Documentation	USN-16	Prepare technical documentation and user manual	4	Medium	5

### 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	20	7 Days	20 Feb 2025	26 Feb 2025	20	26 Feb 2025

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	20	7 Days	28 Feb 2025	06 Mar 2025	20	06 Mar 2025
Sprint-3	20	7 Days	08 Mar 2025	14 Mar 2025	20	14 Mar 2025
Sprint-4	20	7 Days	16 Mar 2025	22 Mar 2025	20	22 Mar 2025

### 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:

The Burndown Chart represents remaining story points versus time. Each sprint starts with 20 story points. Points reduce daily as tasks are completed, reaching zero by the sprint end date.

<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>