

Project Planning Phase

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

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| Date | 16 February 2026 |
| Team ID | LTVIP2026TMIDS66315 |
| Project Name | Explore With Ai: Custom Itineraries For Your Next Journey |
| 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 | Project Setup | USN-1 | Set up Python environment and install required libraries | 2 | High | S. Afrid |
| Sprint-1 | Project Setup | USN-2 | Configure Gemini API securely | 3 | High | P. Sruthi |
| Sprint-1 | UI Development | USN-3 | Design Streamlit interface for travel details input | 3 | High | K. Jagadesh Reddy |
| Sprint-1 | UI Development | USN-4 | Create input fields (destination, days, nights) | 2 | High | M. Prathima |
| Sprint-1 | UI Development | USN-5 | Add "Generate Itinerary" button | 2 | High | S. Afrid |
| Sprint-2 | Input Validation | USN-6 | Validate destination input | 2 | High | P. Sruthi |
| Sprint-2 | Input Validation | USN-7 | Validate number of days and nights | 2 | High | K. Jagadesh Reddy |
| Sprint-2 | Prompt Engineering | USN-8 | Create structured prompt for AI model | 3 | High | M. Prathima |
| Sprint-2 | AI Integration | USN-9 | Integrate Gemini Generative AI API | 5 | High | S. Afrid, K. Jagadesh Reddy |
| Sprint-2 | Output Handling | USN-10 | Display generated itinerary in readable format | 3 | Medium | P. Sruthi |

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|----------|----------------|--------|-------------------------------------|---|--------|-------------|
| Sprint-2 | Error Handling | USN-11 | Implement try-except for API errors | 2 | Medium | M. Prathima |
|----------|----------------|--------|-------------------------------------|---|--------|-------------|

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

| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed | Sprint Release Date |
|----------|--------------------|----------|-------------------|---------------------------|------------------------|---------------------|
| Sprint-1 | 12 | 7 Days | 01 Feb 2026 | 07 Feb 2026 | 12 | 07 Feb 2026 |
| Sprint-2 | 19 | 7 Days | 08 Feb 2026 | 14 Feb 2026 | 19 | 14 Feb 2026 |

➤ Velocity Calculation

Total Story Points = 12 + 19 = 31

Number of Sprints = 2

Velocity = 31 / 2

= 15.5 ≈ 16 Story Points per Sprint

➤ Average Velocity per Day

If sprint duration = 7 days

Velocity per sprint = 16 story points

Average Velocity per day = 16 / 7

≈ 2.3 Story Points per Day

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>