

Project Planning Phase

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

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| Date | 18 Feb 2026 |
| Team ID | LTVIP2026TMIDS80588 |
| Project Name | TransLingua: AI-Powered Multi-Language Translator |
| 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 | Data Acquisition | USN-1 | As a user, I can upload PDF and Image files to the application | 2 | High | |
| Sprint-1 | Data Acquisition | USN-2 | As a user, I can view my uploaded file in the session dashboard | 1 | High | |
| Sprint-1 | Input Pre-processing | USN-3 | As a system, I can enhance image quality to improve OCR accuracy. | 3 | High | |
| Sprint-1 | Input Pre-processing | USN-4 | As a system, I can extract and parse text from multi-page PDFs. | 3 | Medium | |
| Sprint-1 | Input Pre-processing | USN-5 | As a system, I can handle encoding for regional Indian languages. | 3 | Medium | |
| Sprint-2 | Translation Engine | USN-6 | As a user, I can translate document text using Gemini 3 Flash. | 2 | High | |
| Sprint-2 | Translation Engine | USN-7 | As a traveler, I can translate signs using the Gemini Vision API | 2 | High | |
| Sprint-2 | Translation Engine | USN-8 | As a user, I receive context-aware technical translation refinements. | 2 | Medium | |
| Sprint-2 | Translation Engine | USN-9 | As a system, I can automatically switch to Gemini 2.5 if 3.0 fails | 4 | Low | |
| Sprint-2 | Dashboard | USN-10 | As a user, I can navigate between Document and Vision translation tabs | 5 | High | |

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|----------|-------------------------------|-------------------|---|--------------|----------|--------------|
| Sprint-2 | Output Delivery | USN-11 | As a user, I can download the translated output as a formatted PDF. | 5 | High | |

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 | 12 | 6 Days | 03 Feb 2026 | 08 Feb 2026 | 12 | 08 Feb 2026 |
| Sprint-2 | 20 | 6 Days | 10 Feb 2026 | 15 Feb 2026 | 20 | 15 Feb 2025 |

Velocity:

- Total Story Points Completed: 32 (12 from Sprint 1 + 20 from Sprint 2)
- Total Sprints: 2
- Average Velocity (AV): $32 \div 2 = 16$ story points per sprint
- Velocity per Day: $16 \text{ story points} \div 6 \text{ days} = \sim 2.6$ points per day

Burndown Chart:

1. Estimation Strategy: "For the Universal TransLingua AI project, we utilized Story Points as our estimation statistic. This allowed us to measure the complexity of integrating the Gemini Vision API and the Streamlit dashboard without the pressure of rigid hourly deadlines."
2. Tracking Logic: "We monitored our progress using a Sprint Burndown Chart.
 - Sprint 1: Started with 12 points and ended at 0.
 - Sprint 2: Started with 20 points and ended at 0. Our team Velocity was 16, meaning we successfully managed the scope of the translation tool within the planned timeframe."
3. Action taken from Chart: "During Sprint 2, the burndown chart showed a slight delay during the PDF formatting task. To stay on track, we prioritized the Core Translation Engine (USN-6) over the Failover Logic (USN-9), ensuring a functional product by the release date."

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>