

## Project Planning Phase

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

Date	18 February 2026
Team ID	LTVIP2026TMIDS81723
Project Name	Civil Engineering Insight Studio
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
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email and password.	2	High
Sprint-1	User Access	USN-5	As a user, I can log into the application to access my site project dashboard.	1	High
Sprint-2	Image Upload	USN-6	As an engineer, I can upload high-res images of construction site skeletons (rebar/beams).	3	High
Sprint-2	AI Reasoning	USN-7	As a user, I want the Gemini API to identify structural members and count materials automatically.	5	High
Sprint-3	Reporting	USN-8	As an engineer, I want to download a technical audit report in Markdown or PDF format.	3	Medium

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority
Sprint-3	Audit History	USN-9	As a project manager, I want to view a history of previous audits to track site progress.	2	Medium
Sprint-4	Security	USN-10	As an admin, I want to ensure all site images and reports are encrypted at rest.	3	High

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

Sprint Phase	Duration	Functional Focus (Epic)	Key User Stories / Tasks
Sprint 1: Foundation	Dec 1 – Dec 20	Registration & Login	USN-1: Email/Password registration; USN-4: Gmail integration; USN-5: Secure Login.
Sprint 2: Core AI	Dec 21 – Jan 15	Site Analysis (Gemini)	USN-6: Site photo upload; USN-7: Gemini 2.5 Flash visual reasoning for material counting.
Sprint 3: Reporting	Jan 16 – Jan 31	Technical Output	USN-8: PDF/Markdown report generation; USN-9: Audit history dashboard for progress tracking.
Sprint 4: Finalize	Feb 1 – Feb	Security &	NFR-2: Security implementations (SHA-256); NFR-4: Performance optimization

Sprint Phase	Duration	Functional Focus (Epic)	Key User Stories / Tasks
	15	Deployment	for <30s results. +1

### Internship Success Metrics

- According to the **Application Characteristics** guidelines, your project will be evaluated on the following:
- **Scalability:** Justifying a 3-tier architecture that allows for multiple concurrent site audits.
- **Availability:** Ensuring the cloud-hosted app is reachable for on-site field engineers 24/7.
- **Novelty:** Solving the problem of manual labor-intensive counting through automated multimodal AI.