

## Project Planning Phase

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

Date	15 February 2026
Team ID	LTVIP2026TMIDS88398
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
Maximum Marks	5 marks

#### Product Backlog, Sprint Schedule, and Estimation:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register by entering name, email and password.	2	High	Team
Sprint-1	Login	USN-2	As a user, I can login using registered credentials.	1	High	Team
Sprint-1	Image Upload	USN-3	As a user, I can upload retinal fundus image for DR detection.	3	High	Team
Sprint-2	Prediction	USN-4	As a user, I can receive DR stage classification result.	5	High	Team
Sprint-2	Image Preprocessing	USN-5	System resizes and normalizes image before prediction.	3	High	Team

Sprint-3	Database Integration	USN-6	System stores prediction result in database.	3	Medium	Team
Sprint-3	Result Display	USN-7	As a user, I can view predicted DR stage clearly.	2	High	Team
Sprint-4	Model Optimization	USN-8	Improve model performance and accuracy.	5	Medium	Team
Sprint-4	Deployment	USN-9	Deploy application on local/cloud server.	4	Medium	Team

### Project Tracker, Velocity & Burndown Chart:

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	6	6 Days	15 Feb 2025	20 Jan 2026	6	20 Jan 2026
Sprint-2	8	6 Days	22 Feb 2025	29 Jan 2026	8	29 Jan 2026
Sprint-3	5	6 Days	02 Mar 2025	5 Feb 2026	5	5 Feb 2026
Sprint-4	9	6 Days	19 Mar 2025	12 Feb 2026	9	12 Feb 2026

### Velocity:

Assume a sprint duration of 6 days and total story points of 6 in Sprint-1.

Average Velocity (AV) per iteration unit:

$$AV = \text{Total Story Points} / \text{Sprint Duration}$$

$$AV = 6 / 6 = 1 \text{ story point per day}$$