

## 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	Epic	User Story	Story Points	Priority
Sprint-1	Data Collection & Preparation	Collect DR dataset (USN-1)	2	High
Sprint-1	Data Collection & Preparation	Image preprocessing & augmentation (USN-2)	3	High
Sprint-2	Model Development	Implement Xception transfer learning (USN-3)	5	High
Sprint-2	Model Development	Train & validate model (USN-4)	3	High
Sprint-3	Web Application	Develop user registration & login (USN-5)	2	High
Sprint-3	Web Application	Image upload & prediction integration (USN-6)	3	High
Sprint-4	Deployment & Testing	Database integration (USN-7)	2	Medium
Sprint-4	Deployment & Testing	Model optimization & deployment (USN-8)	5	Medium

### Project Tracker, Velocity & Burndown Chart:

Sprint	Total Story Points	Duration (Days)	Completed
Sprint-1	5	6	5
Sprint-2	8	6	8
Sprint-3	5	6	5
Sprint-4	7	6	7

### Velocity Calculation:

Total Story Points =  $5 + 8 + 5 + 7 = 25$

Number of Sprints = 4

Velocity = Total Story Points / Number of Sprints

Velocity =  $25 / 4 = 6.25 \approx 6$  Story Points per Sprint

Planning follows Agile methodology (Epics → Stories → Story Points using Fibonacci scale 1,2,3,5).