Project Planning Phase

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

Date	15 February 2026
Team ID	LTVIP2026TMIDS82253
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
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 Collection	DR-USN-1	As a system, I can collect retinal fundus images from publicly available medical datasets.	2	High	Team A
Sprint-1	Data Collection	DR-USN-2	As a system, I can organize fundus images into Normal and Diabetic Retinopathy classes.	1	High	Team A
Sprint-1	Data Preprocessing	DR-USN-3	As a system, I can resize and normalize fundus images for model training.	3	Medium	Team B
Sprint-1	Data Preprocessing	DR-USN-4	As a system, I can split the dataset into training and testing sets.	2	Medium	Team B
Sprint-2	Model Building	DR-USN-5	As a system, I can build a deep learning model using **Xception transfer learning** for DR detection.	5	High	Team C
Sprint-2	Model Evaluation	DR-USN-6	As a user, I can view the accuracy and loss of the trained model on test data.	3	High	Team C

Sprint-2	Web Application	DR-USN-7	As a user, I can upload fundus images through a Flask-based web interface.	3	Medium	Team D

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date	Story Points Completed	Sprint
Sprint-1	8	4 Days	Feb 10 2026	Feb 13 2026	8	Sprint-1
Sprint-2	16	5 Days	Feb 13 2026	Feb 17 2026	16	Sprint-2

Velocity:
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

Total Story Points Completed: 8 + 16 = 24

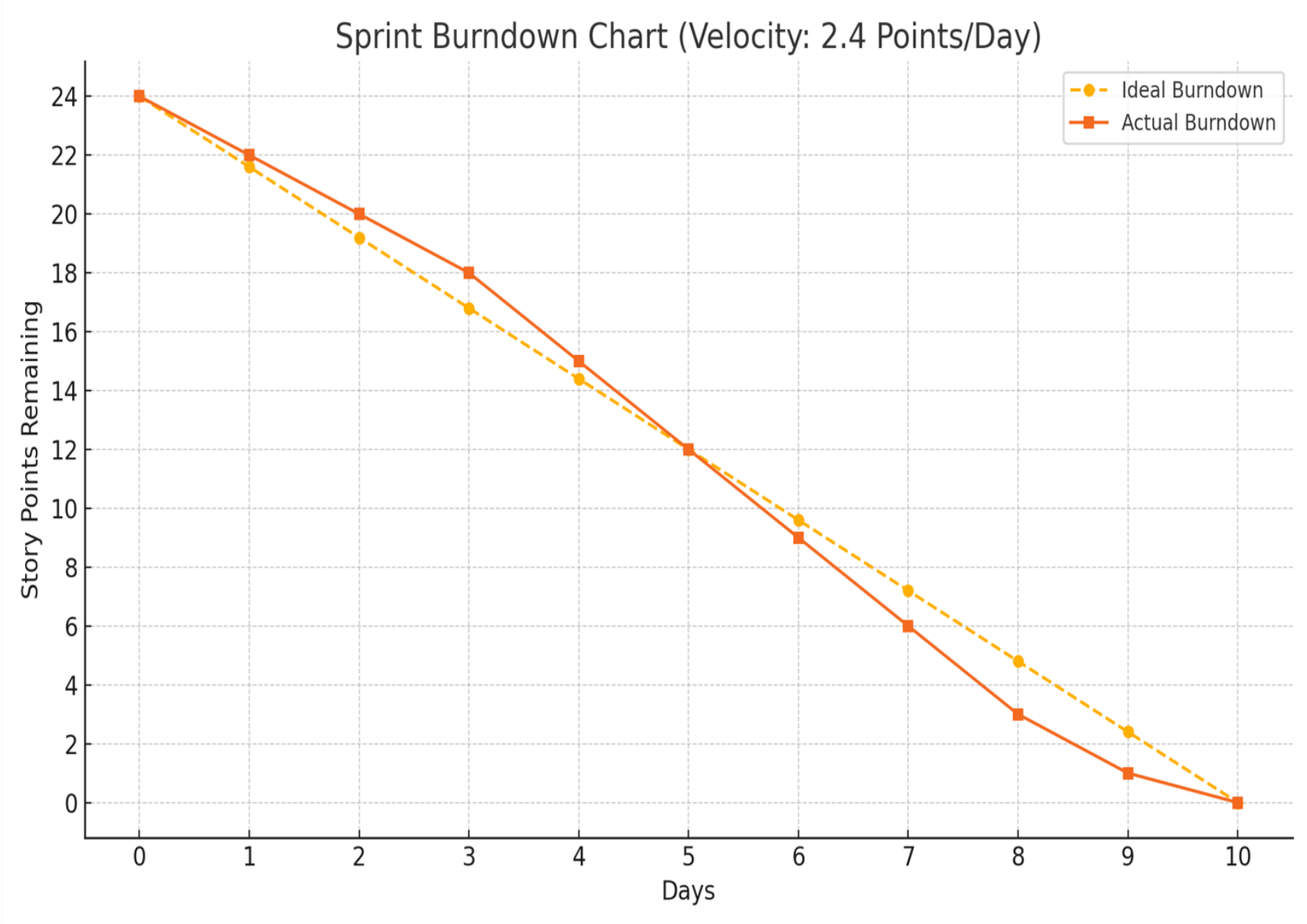
Number of Sprints Completed: 2

Velocity = Total Story Points / Number of

Sprints = 24 / 2 = 12 Story Points per Sprint

✅ Average Velocity (Story Points per Day) = 24 / (5+5) = 2.4 Points per Day

Burndown chart:


Sprint Burndown Chart (Velocity: 2.4 Points/Day)
Ideal Burndown
Actual Burndown
Story Points Remaining
Days
0
2
4
6
8
10
12
14
16
18
20
22
24
0
1
2
3
4
5
6
7
8
9
10