Project Planning Phase

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

Date	19 February 2026
Team ID	LTVIP2026TMIDS40157
Project Name	HematoVision: Advanced Blood Cell Classification Using Transfer Learning
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

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 & Preparation	USN-1	As a developer, I will collect and organize 12,000 blood cell images for training.	5	High	Team
Sprint-1	Data Preprocessing	USN-2	As a developer, I will perform image resizing, normalization, and augmentation.	5	High	Team
Sprint-2	Model Selection	USN-3	As a developer, I will choose a pre-trained CNN model (ResNet/MobileNet).	3	Low	Team
Sprint-2	Model Training	USN-4	As a developer, I will implement transfer learning and fine-tune the model.	5	Medium	Team
Sprint-3	Model Evalution	USN-5	As a developer, I will evaluate the model using accuracy, precision, recall, and F1-score.	4	High	Team
Sprint-4	Confusion Matrix	USN-6	As a developer, I will generate performance graphs and confusion matrix.	3	High	Team
Sprint-4	Deployment	USN-7	As a user, I can upload a blood smear image for classification.	4	High	Team
Sprint-4	Report Generation	USN-8	As a user, I can view prediction results with confidence score.	3	High	Team
Sprint-4	UI Development	USN-9	As a user, I can interact with a simple web interface.	3	Medium	Team

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	20	6 Days	01 Mar 2025	06 Mar 2025	20	06 Mar 2025
Sprint-2	20	6 Days	08 Mar 2025	13 Mar 2025	20	13 Mar 2025
Sprint-3	20	6 Days	15 Mar 2025	20 Mar 2025	20	20 Mar 2025
Sprint-4	20	6 Days	22 Mar 2025	27 Mar 2025	20	27 Mar 2025

Velocity Calculation

Assume:

- Sprint Duration = 6 days
- Total Average Story Points per Sprint ≈ 9

Average Velocity (AV) per day:

$$AV = \frac{9 \text{ Story Points}}{6 \text{ Days}} = 1.5 \text{ Points per Day}$$

This indicates the team completes approximately **1.5 story points per day**.

Burndown Chart:

A **Burndown Chart** represents:

- X-axis → Time (Sprint Days)

- Y-axis → Remaining Story Points

For HematoVision:

- Initial Sprint Backlog: 10 Story Points
- Gradual decrease each day as tasks are completed
- Reaches zero on planned sprint end date

This ensures:

- Proper sprint monitoring
- Transparent progress tracking
- Early identification of delays