Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2026TMIDS76616
Project Name	HematoVision – Advanced Blood Cell Classification Using Transfer Learning
Maximum Marks	5 Marks

Team Structure & Contribution Details

The project team consists of four members as assigned in the APSCHE portal. However, during the execution phase of the project, only two members were actively involved in the development and implementation process.The remaining team members were system-assigned during team formation and were not actively participating in project planning, sprint activities, or technical development.

The active contributors to this project are:

- **Baitapalli Kishor – Team Leader**
- **Pavan Kenguva – Team Member**

Both active members were responsible for:

- Requirement Analysis
- Dataset Collection & Preparation
- Model Development using MobileNetV2
- Model Training & Evaluation
- Flask Web Application Development
- Integration & Deployment
- Documentation & Testing

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	USN-1	Gather blood cell image dataset	2	High	Baitapalli Kishor, Pavan Kenguva
Sprint-1	Data Collection	USN-2	Load dataset into Python environment	1	High	Baitapalli Kishor, Pavan Kenguva
Sprint-2	Data Preparation	USN-3	Handle missing values	3	High	Baitapalli Kishor, Pavan Kenguva
Sprint-1	Data Preparation	USN-4	Create required features	3	Medium	Baitapalli Kishor, Pavan Kenguva
Sprint-1	Data Preparation	USN-5	Handle data inconsistencies	3	High	Baitapalli Kishor, Pavan Kenguva
Sprint-2	Model Development	USN-6	Implement MobileNetV2 model	5	High	Baitapalli Kishor, Pavan Kenguva
Sprint-2	Model Training	USN-7	Train model with dataset	5	High	Baitapalli Kishor, Pavan Kenguva
Sprint-2	Model Evaluation	USN-8	Evaluate model	3	High	Baitapalli Kishor, Pavan Kenguva
Sprint-2	Flask Integration	USN-9	Integrate trained model with Flask	4	High	Baitapalli Kishor, Pavan Kenguva
Sprint-2	UI Development	USN-9	Develop result display interface	3	Medium	Baitapalli Kishor, Pavan Kenguva

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	7 Days	01 Feb 2025	07 Feb 2025	18	07 Feb 2025
Sprint-2	20	7 Days	08 Feb 2025	14 Feb 2025	20	14 Feb 2025
Sprint-3	20	7 Days	15 Feb 2025	21 Feb 2025	19	21 Feb 2025
Sprint-4	20	7 Days	22 Feb 2025	28 Feb 2025	20	28 Feb 2025

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)

Velocity = Average story points completed per sprint

(18 + 20 + 19 + 20) / 4

= 77 / 4

= **19.25 ≈ 19 story points per sprint**

The team completed an average of 19 story points per sprint, demonstrating consistent development velocity. The project progressed through structured sprints covering data preparation, model training, integration, and deployment phases.

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts