Project Planning Phase

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

Date	19 Feb 2026
Team ID	LTVIP2026TMIDS66121
Project Name	Hematovision: Advanced Blood Cell Classification Using Transfer Learning
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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Siva, Pranay, Abhishek, Jahnavi
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Siva, Pranay, Abhishek, Jahnavi
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	Siva, Pranay, Abhishek, Jahnavi
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	Siva, Pranay, Abhishek,

						Jahnavi
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Siva, Pranay, Abhishek, Jahnavi
	Dashboard					

Project Planning Phase

This document outlines the comprehensive project plan for HematoVision, an advanced blood cell classification system. The planning process adheres to agile methodologies, focusing on iterative development through sprints, detailed user stories, and precise effort estimation. This structured approach ensures clarity, efficiency, and adaptability throughout the project lifecycle.

Product Backlog, Sprint Schedule, and Estimation

This section details the product backlog, organized into functional epics, with user stories, estimated story points, and assigned priorities. The sprint schedule will be defined to facilitate iterative development and continuous delivery.

Product Backlog

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 for the application by entering my email, password, and confirming my password. | 2 | High | |

| Sprint-1 | Registration | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | High | |

| Sprint-2 | Registration | USN-3 | As a user, I can register for the application through Facebook | 2 | Low | |

| Sprint-1 | Registration | USN-4 | As a user, I can register for the application through Gmail | 2 | Medium | |

| Sprint-1 | Login | USN-5 | As a user, I can log into the application by entering email & password | 1 | High | |

Sprint Schedule

This section outlines the planned sprints for the HematoVision project, detailing the objectives, duration, and key deliverables for each sprint. Each sprint will typically last two weeks, allowing for focused development and regular feedback. **Sprint 1: Core Functionality & User Authentication**

Duration: [Start Date] - [End Date]

Objectives:

- Implement core user registration and login functionalities.
- Ensure secure user authentication and account management.
- Set up the basic web application structure.

Key Deliverables:

- Functional user registration via email.
- User login system.
- Email confirmation for new registrations.
- Basic Flask application with home.html and result.html templates.

Sprint 2: Enhanced Authentication & Model Integration

Duration: [Start Date] - [End Date]

Objectives:

- Integrate social media login options (Facebook, Gmail).
- Begin integration of the MobileNetV2 model for blood cell classification.
- Develop the image upload and prediction display interface.

Key Deliverables:

- Facebook and Gmail registration/login.
- Image upload functionality.
- Initial blood cell classification display on result.html .
- blood_cell.h5 model integrated into app.py .

Sprint 3: Model Refinement & Deployment Preparation

Duration: [Start Date] - [End Date]

Objectives:

- Refine the classification model for improved accuracy.
- Optimize the application for performance and scalability.
- Prepare the application for deployment.

Key Deliverables:

- Optimized blood_cell.h5 model.
- Performance improvements in app.py .
- Deployment readiness checklist and documentation.

Estimation Methodology

Story points are used to estimate the effort required for each user story, reflecting complexity, risk, and effort. The team will engage in planning poker or similar techniques to collectively estimate stories, fostering shared understanding and commitment.

- **1 Point**: Very small, simple task (e.g., minor text change).
- **2 Points**: Small, straightforward task (e.g., simple UI element, basic data retrieval).
- **3 Points**: Medium complexity, requires some logic (e.g., form validation, simple API integration).
- **5 Points**: Large, more complex task (e.g., significant feature development, complex algorithm).
- **8 Points**: Very large, highly complex task (e.g., major architectural change, integrating a new external system).