Hematovision – Project Logic

Agile Terms

- Sprint: A fixed period (5 days) during which the team works to complete specific tasks.
- Epic: A large segment of the project, usually too big for a single sprint, divided into smaller Stories.
- Story: A small, actionable task within an Epic.
- Story Point: A measure of effort required to complete a Story, often following the Fibonacci sequence (1, 2, 3, 5, etc.).

Sprint Planning

Sprint 1 (5 Days) – 8 Story Points

Epic: Data Collection and Preprocessing

Story	Story Points
Search & download dataset (blood smear images)	2
Load dataset into notebook	1
Check for missing data & handle missing values	2
Encode categorical labels (cell types)	2
Explore data (visualizations, class distribution)	1

Total Story Points – Sprint 1: 8

Sprint 2 (5 Days) – 16 Story Points

Epic: Model Development & Deployment

Story	Story Points
Choose pretrained models for transfer learning	2
Build transfer learning pipeline	3
Train model on dataset	3
Evaluate model accuracy, confusion matrix	2
Prepare plots for results (accuracy curves, etc.)	1
Build HTML UI for predictions	2
Create Flask app backend	2
Integrate model into Flask app	1

Total Story Points – Sprint 2: 16

Velocity Calculation

- Total Story Points = 8 + 16 = 24
- Number of Sprints = 2
- Velocity = Total Story Points / Number of Sprints = 24 / 2 = 12 Story Points per Sprint

Hence, our team's velocity is 12 Story Points per Sprint.

Project Planning Template – Hematovision

Project Planning Phase

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

Date: [26 June 2025]

Team ID: [LTVIP2025TMID39901]

Project Name: Hematovision – Advanced Blood Cell Classification using Transfer Learning

Maximum Marks: 5 Marks

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

Sprint	Functio nal Require ment (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Membe rs
Sprint-1	Data Collectio n	USN-1	Search and downloa d blood cell image datasets	2	High	Yaga Lakshmi
Sprint-1	Data Collectio n	USN-2	Load dataset into noteboo k and check format	1	High	Yaga Lakshmi
Sprint-1	Data Preproce ssing	USN-3	Handle missing values in dataset	2	Medium	Thumma la Kavya
Sprint-1	Data Preproce ssing	USN-4	Encode categori cal labels for cell types	2	Medium	Thumma la Kavya

Sprint-1	Data Exploration	USN-5	Visualize class distribution and sample images	1	Medium	Yaga Lakshmi
Sprint-2	Model Building	USN-6	Choose pretrained models for transfer learning	2	High	Vidavalu ru Glory Manvitha
Sprint-2	Model Building	USN-7	Build transfer learning pipeline	3	High	Vidavalu ru Glory Manvitha
Sprint-2	Model Training	USN-8	Train model on blood cell dataset	3	High	Vidavalu ru Glory Manvitha
Sprint-2	Evaluation	USN-9	Evaluate model accuracy and confusion matrix	2	High	Vidavalu ru Glory Manvitha
Sprint-2	Results	USN-10	Plot learning curves and accuracy charts	1	Medium	Vidavalu ru Glory manvitha
Sprint-2	Deployment	USN-11	Build HTML page for predictions	2	High	Saragadam Bhuvaneshwari
Sprint-2	Deployment	USN-12	Create Flask app backend for predictions	2	High	Saragadam Bhuvaneshwari

Sprint-2	Deployment	USN-13	Integrate trained model	1	High	Saragadam Bhuvaneshwari
			into Flask app			

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	8	5 Days	18 June 2025	23 June 2025	8	22 June 2025
Sprint-2	16	5 Days	23 June 2025	27 June 2025	16	28 June 2025

Velocity Calculation:

- Total Story Points = 24
- Number of Sprints = 2
- Velocity = Total Story Points / Number of Sprints = 12 Story Points per Sprint

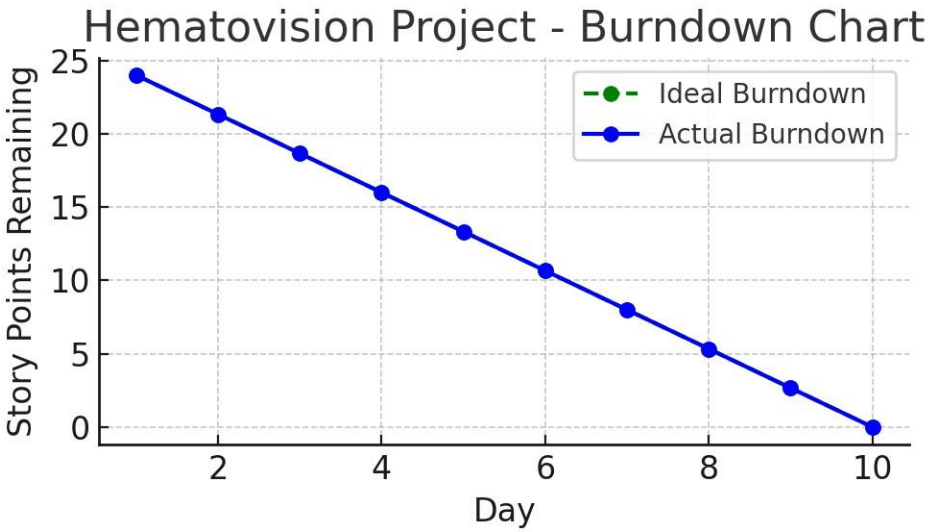
Hence, our team's velocity is 12 Story Points per Sprint.

Burndown Chart:

See burndown chart below for Hematovision project progress:

References:

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


Hematovision Project - Burndown Chart
Story Points Remaining
Day
Ideal Burndown
Actual Burndown
25
20
15
10
5
0
2
4
6
8
10