**Project Planning Phase**

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

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| --- | --- |
| Date | 23 June 2025 |
| Team ID | LTVIP2025TMID39799 |
| Project Name | Cleantech: Transforming Waste Management With 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

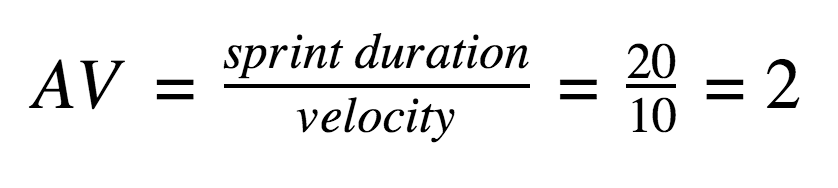
| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | Dataset Setup & Preprocessing | USN-1 | As a developer, I want to load and explore the dataset so I can understand its structure and requirements. | 2 | High | Lakshmi |
| Sprint-1 | Dataset Setup & Preprocessing | USN-2 | As a developer, I want to apply image preprocessing and augmentation to improve model performance. | 3 | High | Lakshmi |
| Sprint-2 | Model Building with Transfer Learning | USN-3 | As a developer, I want to fine-tune a pre-trained CNN (ResNet50/VGG16) on the WBC dataset. | 5 | High | Lakshmi |
| Sprint-1 | Model Evaluation | USN-4 | As a developer, I want to evaluate the model using test data and visualize the confusion matrix. | 3 | High | Lakshmi |
| Sprint-3 | Web App Development | USN-5 | As a user, I want to upload a blood cell image and receive a classification result. | 4 | Medium | Lakshmi |
| Sprint-3 | Web App Development | USN-6 | As a user, I want the interface to show prediction probability and WBC type for interpretability. | 2 | Medium | Lakshmi |
| Sprint-4 | Final Testing and Deployment | USN-7 | As a developer, I want to test the model on unseen data to verify its robustness. | 3 | High | Lakshmi |
| Sprint-4 | Final Testing and Deployment | USN-8 | As a developer, I want to deploy the Flask app for public demonstration and testing. | 2 | Medium | Lakshmi |

**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 | 5 | 5 Days | 01 July 2025 | 5 July 2025 | TBD | TBD |
| Sprint-2 | 8 | 5 Days | 6 July 2025 | 10 July 2025 | TBD | TBD |
| Sprint-3 | 6 | 5 Days | 11 July 2925 | 15 July 2025 | TBD | TBD |
| Sprint-4 | 5 | 5 Days | 16 July 2025 | 20 July 2025 | TBD | TBD |
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**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)



**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](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies such as [Scrum](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/). 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>**