Project Planning Phase

Date: 17 July 2025

Team ID: LTVIP2025TMID46030

Project Name: HEMATOVISION: Advanced Blood Cell Classification Using Transfer Learning

# Product Backlog and Sprint Planning

## Sprint 1: Data Acquisition and Preprocessing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User Story ID | User Story | Story Points | Priority | Team Member |
| USN-1 | As a user, I can upload blood smear images for analysis. | 3 | High | TBD |
| USN-2 | As a user, I can view the preprocessing summary (contrast, normalization). | 2 | Medium | TBD |

## Sprint 2: Model Selection and Training

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User Story ID | User Story | Story Points | Priority | Team Member |
| USN-3 | As a data scientist, I can choose a pretrained CNN model (e.g., ResNet, EfficientNet). | 3 | High | TBD |
| USN-4 | As a developer, I can train the model on the uploaded data. | 5 | High | TBD |

## Sprint 3: Model Evaluation and Refinement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User Story ID | User Story | Story Points | Priority | Team Member |
| USN-5 | As a user, I can view model evaluation metrics (accuracy, precision, recall). | 3 | Medium | TBD |
| USN-6 | As a developer, I can fine-tune the model using transfer learning. | 5 | High | TBD |

## Sprint 4: Results Dashboard and User Interface

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User Story ID | User Story | Story Points | Priority | Team Member |
| USN-7 | As a user, I can interact with a dashboard to view predictions. | 3 | High | TBD |
| USN-8 | As a user, I can download classification results in CSV format. | 2 | Medium | TBD |

# Sprint Tracker, Velocity & Burndown Chart Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sprint | Dates | Planned Story Points | Completed Story Points | % Complete | Actual Release Date |
| 1 | 17–22 July 2025 | 20 |  |  |  |
| 2 | 23–28 July 2025 | 20 |  |  |  |
| 3 | 29 July – 3 August 2025 | 20 |  |  |  |
| 4 | 4–10 August 2025 | 20 |  |  |  |

# Velocity Calculation

Velocity is defined as the sum of story points completed in a sprint. For our six-day sprints with 20 planned story points, the average velocity is:

Velocity = 20 story points / 6 days = 3.33 SP/day