# 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.

## Team Member Allocation

|  |  |
| --- | --- |
| **Team Member** | **Responsibilities** |
| **Yaga Lakshmi** | Data collection, loading data, EDA |
| **Thummala Kavya** | Data preprocessing, encoding |
| **Vidavaluru Glory Manvitha** | Model selection, building, training |
| **Saragadam Bhuvaneshwari** | Deployment, Flask, UI |