Agile Planning for the Project

Project Title: Advanced Blood Cell Classification using Transfer Learning (Haemovision)

Sprint Duration

Each sprint duration is 2 weeks.

Sprint 1 – Data Collection and Preparation Phase

In Sprint 1, the team focused on data collection and preprocessing tasks.

Epic 1: Data Collection

• Gathering Haemovision dataset – 2 Story Points

• Loading dataset into the system – 1 Story Point

Epic 2: Data Preparation

• Handling missing values – 3 Story Points

• Image resizing and normalization – 3 Story Points

• Data augmentation (rotation, flipping, zooming) – 3 Story Points

Total Story Points in Sprint 1 = 2 + 1 + 3 + 3 + 3 = 12

Sprint 2 – Model Development and Deployment Phase

In Sprint 2, the team worked on model building, evaluation, and deployment.

Epic 3: Model Development

• Implementing transfer learning using pre-trained CNN (ResNet/MobileNet) – 3 Story Points

• Adding custom dense layers – 2 Story Points

• Training the model – 3 Story Points

• Evaluating model performance (accuracy, confusion matrix, precision, recall) – 3 Story Points

Epic 4: Deployment and Interface

• Developing web interface using Flask/Streamlit – 5 Story Points

• Integrating trained model with UI – 4 Story Points

Total Story Points in Sprint 2 = 3 + 2 + 3 + 3 + 5 + 4 = 20

Total Story Points and Velocity Calculation

Total Story Points completed = 12 (Sprint 1) + 20 (Sprint 2) = 32

Number of Sprints = 2

Velocity = Total Story Points Completed / Number of Sprints

Velocity = 32 / 2

Therefore, the team velocity is 16 Story Points per Sprint.