

## **Sprint Planning – HematoVision**

### **Story Point Scale**

- **1** – Very Easy
- **2** – Easy
- **3** – Moderate
- **5** – Difficult

## **Sprint 1 – Data & Model Foundation**

### **Epic 1: Data Collection**

- Dataset Acquisition (USN1) – 2
- Data Loading & Directory Structuring (USN2) – 1

### **Epic 2: Data Preparation**

- Image Resizing & Normalization (USN3) – 3
- Data Augmentation (USN4) – 3
- Train-Test Split (USN5) – 2

### **Epic 3: Model Initialization**

- Load Pre-trained Model (VGG16/ResNet) (USN6) – 3
- Freeze Base Layers & Add Custom Layers (USN7) – 5

### **Total Story Points in Sprint 1**

$2 + 1 + 3 + 3 + 2 + 3 + 5 = \mathbf{19}$

## **Sprint 2 – Training, Evaluation & Deployment**

### **Epic 4: Model Training & Evaluation**

- Model Compilation (Optimizer, Loss, Metrics) (USN8) – 2
- Model Training with Early Stopping (USN9) – 5
- Performance Evaluation (Confusion Matrix, F1-score) (USN10) – 3
- Model Saving (USN11) – 1

### **Epic 5: Flask Application Development**

- Create HTML Upload Interface (USN12) – 3
- Integrate Model with Flask Backend (USN13) – 5
- Display Prediction + Confidence Score (USN14) – 3

### **Total Story Points in Sprint 2**

$$2 + 5 + 3 + 1 + 3 + 5 + 3 = \mathbf{22}$$

### Total Story Points

Sprint 1 = 19

Sprint 2 = 22

Total = 41

Number of Sprints = 2

Velocity =  $41 / 2 = \mathbf{20.5} \approx 20$  Story Points per Sprint

### Team Velocity

Your team's velocity is approximately **20 Story Points per Sprint**.