**Agile Sprint Planning – Enhanced Wings: Marvels of Butterfly Species**

**Key Agile Terms (Used in This Plan)**

* **Sprint:** A 5-day period to complete focused project tasks
* **Epic:** A major functional area (e.g., Data Handling, Model Integration).
* **Story:** A small, actionable unit of work under an epic.
* **Story Point:** A measure of effort (1 = Very Easy, 5 = Difficult).
* **Velocity:** Average number of story points completed per sprint.

**Sprint 1 (5 Days) – Data Preparation Phase**

**Epic 1: Data Collection & Preprocessing**

| **Story** | **Story Point** | **Effort Level** |
| --- | --- | --- |
| **Collect butterfly image dataset (e.g., Kaggle, BioTrove)** | **2** | **Easy** |
| **Resize and normalize image data** | **1** | **Very Easy** |
| **Apply data augmentation techniques** | **3** | **Moderate** |
| **Label and organize dataset for training** | **2** | **Easy** |

**Total Sprint 1 Story Points: 8**

**Sprint 2 (5 Days) – Model & Deployment Phase**

**Epic 2: Model Building and Deployment**

| **Story** | **Story Point** | **Effort Level** |
| --- | --- | --- |
| **Train CNN model (e.g., ResNet/MobileNet)** | **5** | **Difficult** |
| **Test and evaluate model performance** | **3** | **Moderate** |
| **Build Flask API for image prediction** | **5** | **Difficult** |
| **Design frontend using HTML/CSS/JS** | **3** | **Moderate** |

**Total Sprint 2 Story Points: 16**

**Sprint Summary**

| **Metric** | **Value** |
| --- | --- |
| **Sprint 1 Story Points** | **8** |
| **Sprint 2 Story Points** | **16** |
| **Total Story Points** | **24** |
| **Total Sprints** | **2** |
| **Team Velocity** | **12 (Story Points/Sprint)** |

**Example:**

