

Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	21 JUNE 2025
Team ID	LTVIP2025TMID32471
Project Name	Enchanted Wings: Marvels of Butterfly Species
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story ID	User Story / Task	Story Points	Priority	Team Members
Sprint-1 (Jun 21-22)	Backend Setup	USN-1	Prepare butterfly dataset loading pipelines and preprocessing (train/val/test split)	3	High	Dev1, Dev2
	Backend Setup	USN-2	Integrate pre-trained CNN architecture (e.g. ResNet, EfficientNet) for feature extraction	5	High	Dev2
	Frontend Basics	USN-3	Create Streamlit UI skeleton for butterfly image upload	2	Medium	Dev3
	Frontend Basics	USN-4	Test API connection between Streamlit UI and backend	2	High	Dev1

Sprint	Functional Requirement (Epic)	User Story ID	User Story / Task	Story Points	Priority	Team Members
Sprint-2 (Jun 23-24)	Model Development	USN-5	Implement transfer learning training pipeline for butterfly classification	5	High	Dev2
	Model Evaluation	USN-6	Evaluate model performance (accuracy, confusion matrix)	3	Medium	Dev1, Dev3
	Testing	USN-7	Implement unit tests for prediction pipeline	2	Medium	Dev3
	Documentation	USN-8	Write initial technical documentation for butterfly classifier	2	Low	Dev2

Sprint	Functional Requirement (Epic)	User Story ID	User Story / Task	Story Points	Priority	Team Members
Sprint-3 (Jun 24-25)	Deployment	USN-9	Set up Docker container for deployment of butterfly classifier	3	Medium	Dev3
	Scenarios Integration	USN-10	Implement Scenario 1: Biodiversity monitoring interface for real-time species prediction	3	High	Dev1, Dev2
	Scenarios Integration	USN-11	Implement Scenario 2: Ecological research camera integration for automated tracking	2	Medium	Dev3
	Scenarios Integration	USN-12	Implement Scenario 3: Citizen science educational UI improvements	2	Low	Dev3

Dev1 – P.Bhavana, Dev2 – Mundru Udaysai, Dev3 – Narapureddy Chandrakanth, Dev4 -Munta Navadeep Venkata Sai Kumar

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Start Date	End Date (Planned)	Points Completed	Release Date (Actual)
Sprint-1	12	2 days	Jun 21, 2025	Jun 22, 2025	12	Jun 22, 2025
Sprint-2	12	2 days	Jun 23, 2025	Jun 24, 2025	12	Jun 24, 2025
Sprint-3	10	1 day	Jun 24, 2025	Jun 25, 2025	10 (projected)	Jun 25, 2025

Velocity:

$$\text{Velocity} = \frac{12 + 12 + 10}{3} = 11.33 \text{ points per sprint}$$