Project Planning Phase

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

Date	27th January 2025
Team ID	LTVIP2025TMID36392
Project Name	Enchanted Wing: 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 Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection & Preparation	USN-1	As a developer, I can collect butterfly images and organize them using a labeled CSV file.	2	High	Udayagiri Poorna Akshaya
Sprint-1	Data Preprocessing	USN-2	As a developer, I can preprocess and split images into training and validation sets.	2	High	Udayagiri Poorna Akshaya
Sprint-1	Model Setup	USN-3	As a developer, I can load MobileNetV2 and prepare it for fine-tuning with my dataset.	3	Medium	Udayagiri Poorna Akshaya

Sprint-1	Basic Testing	USN-4	As a developer, I can verify that the model predicts labels correctly on sample inputs.	1	High	Udayagiri Poorna Akshaya
Sprint-2	Model Optimization & Saving	USN-5	As a developer, I can fine-tune the model and save it in .keras format with corresponding label mapping.	3	High	Udayagiri Poorna Akshaya
Sprint-2	Streamlit Interface	USN-6	As a user, I can upload an image and get a butterfly species prediction through a web interface.	4	High	Udayagiri Poorna Akshaya
Sprint-2	Prediction Output Enhancement	USN-7	As a user, I can view the prediction label clearly with confidence score or top-3 results.	2	Medium	Udayagiri Poorna Akshaya
Sprint-2	Deployment	USN-8	As a developer, I can deploy the Streamlit app on GitHub and share the public link for testing and access.	2	High	Udayagiri Poorna Akshaya

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	4 Days	12 June 2025	15 June 2025	20	15 June 2025
Sprint-2	20	4 Days	16 June 2025	19 June 2025	20	19 June 2025
Sprint-3	20	4 Days	20 June 2025	23 June 2025	18 *(Planned)*	23 June 2025 *(Expected)*
Sprint-4	20	3 Days	24 June 2025	26 June 2025	*Planned*	26 June 2025 *(Expected)*

🚀 Velocity & Average Velocity Calculation (Based on Your Project)

- **Total Story Points (Completed)** =
  Sprint-1 (20) + Sprint-2 (20) = **40**

- **Sprint Duration** =
  Sprint-1: 4 days
  Sprint-2: 4 days
  Total duration = **8 days**

Average Velocity
(Story Points per Day)

$$\text{Average Velocity} = \frac{\text{Total Story Points}}{\text{Total Days}}$$

$$= \frac{40}{8}$$

5 Story Points per Day