

Ideation Phase

Brainstorming Template

Date	15 February 2025
Team ID	LTVIP2025TMID42449
Project Name	Butterfly Species Classification System
Maximum Marks	2 Marks

1 Brainstorming

- **Idea 1:** Use a pre-trained CNN (MobileNetV2) for butterfly species classification to leverage transfer learning for high accuracy and efficiency. *(High impact, feasible due to available models)*
- **Idea 2:** Develop a Streamlit web app for user-friendly image uploads and real-time species predictions. *(High impact, engages non-experts)*
- **Idea 3:** Integrate educational facts about butterfly species (e.g., habitat, life-cycle) to support citizen science and education. *(Medium impact, enhances user value)*
- **Idea 4:** Apply image augmentation (rotation, flipping) to improve model generalization. *(Medium impact, improves robustness)*
- **Idea 5:** Deploy on cloud platforms (e.g., Streamlit Cloud) for scalability. *(High impact, ensures accessibility)*
- **Prioritization:** Focus on Ideas 1, 2, and 5 for core functionality and deployment, followed by Ideas 3 and 4 for enhanced features.