Project Development Phase
Model Performance Test

Date	27th January 2025
Team ID	LTVIP2025TMID36392
Project Name	Enchanted Wing: Marvels of Butterfly Species
Maximum Marks	10 Marks

Model Performance Testing:

S.No	Test Description	Input Provided	Expected Output	Actual Output	Result
1	Predict class of a known butterfly image	Image: `image_0123.jpg` (Lemon Pansy)	Lemon Pansy	Lemon Pansy	✅ Pass
2	Predict a different butterfly species	Image: `image_0450.jpg` (Crimson Rose)	Crimson Rose	Crimson Rose	✅ Pass
3	Invalid input image	Non-butterfly image (e.g., dog)	Not a butterfly / Invalid class	Misclassified as butterfly species	❌ Fail
4	Top-3 prediction contains the correct label	Image: `image_0321.jpg` (Monarch)	Monarch in Top-3	Monarch was ranked 2nd	✅ Pass
5	Low-resolution input image	50x50 px butterfly image	Uncertain result or degraded accuracy	Incorrect prediction	❌ Fail
6	Measure prediction time	224x224 px butterfly image	Response within 2 seconds	Predicted in 1.2 seconds	✅ Pass
7	Consistency of prediction for same image	Repeated input: `image_0789.jpg`	Same result each time	Consistent prediction	✅ Pass

Graph for accuracy comparison :

Model Performance Test Results