

Section	Details
Input Types	Butterfly images (various backgrounds, lighting, angles)
Functionality Tested	Image upload, real-time prediction, result display
Expected Output	Accurate butterfly species name + confidence score
Validation Method	Cross-check model output against known labels (from dataset)
Pass Criteria	90%+ accuracy on validation set
Inference Time	< 2 seconds per image
Accuracy	≥ 90% on validation and test data
Stability	Consistent predictions across runs
Resource Usage	Low memory and CPU during inference
Stress Testing	Bulk uploads, low-res images, invalid formats
Tools Used	Python, Flask, Postman, manual test logs