

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Team ID	LTVIP2025TMID38181
Project Name	Enchanted Wings :Marvels Of butterfly Species
Maximum Marks	4 Marks

Functional Requirements - Butterfly Species Classification Project

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Image Upload & Classification	<ul style="list-style-type: none">- Upload butterfly image from mobile or desktop- Real-time camera capture- Auto pre-processing
FR-2	Species Prediction Output	<ul style="list-style-type: none">- View predicted butterfly name- Display confidence score- Link to species info
FR-3	User Learning Module	<ul style="list-style-type: none">- Quiz based on classified butterflies- Feedback after guesses- Learning history tracking
FR-4	Admin Data Management	<ul style="list-style-type: none">- Upload labelled images- Approve/reject citizen uploads- Manage dataset classes

Non-Functional Requirements

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Simple, mobile-friendly UI for students and researchers
NFR-2	Security	Secure user logins, role-based access for admin and public
NFR-3	Reliability	System should classify images with at least 90% accuracy
NFR-4	Performance	Predictions must return within 2 seconds for real-time usage
NFR-5	Availability	24/7 uptime to support global biodiversity monitoring
NFR-6	Scalability	Can handle thousands of users and expanding dataset of butterfly species