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

Date	27 June 2025
Team ID	LTVIP2025TMID5573
Project Name	Enchanted Wings: Marvels of Butterfly Species
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	**User Registration**	- Registration through Form - Registration through Gmail - Registration through LinkedIn
FR-2	**User Confirmation**	- Confirmation via Email - Confirmation via OTP
FR-3	**Butterfly Identification**	- Upload image of butterfly - Model predicts species - Displays species info and image
FR-4	**Favorites & Search**	- Save favorite butterfly species - Search species by name, color, or location
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	**User Registration**	- Registration through Form - Registration through Gmail - Registration through LinkedIn

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The system will have a user-friendly interface with intuitive navigation, clear labeling, and responsive design suitable for all age groups.
NFR-2	**Security**	User login and authentication processes will ensure secure access to the system. All sensitive data is protected using hashed passwords and secure communications.
NFR-3	**Reliability**	The system must reliably identify butterfly species with a high degree of accuracy (above 85%) and ensure consistent behavior across sessions.
NFR-4	**Performance**	The model should return classification results within an average of 1.5 seconds. The app should handle at least 500 concurrent users efficiently.
NFR-5	**Availability**	The application should be available 24/7 with a minimum 99% uptime during planned demonstration and live testing phases.
NFR-6	**Scalability**	The architecture should allow easy scaling of services, including ML model and database, to accommodate more users or additional species in the future.