

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

Date	10 October 2022
Team ID	PNT2022TMID49396
Project Name	Digital Naturalist - AI Enabled tool for Biodiversity Researchers
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	<ul style="list-style-type: none">• Registration through Form• Registration through Gmail• Registration through LinkedIn
FR-2	User Confirmation	<ul style="list-style-type: none">• Confirmation via Email• Confirmation via OTP
FR-3	Transactions	<ul style="list-style-type: none">• Secure through UPI ID• Secure through Debit/Credit cards• Secure through Net banking
FR-4	Authentication	<ul style="list-style-type: none">• Through Biometrics• Through OTP verification• Through Strong passwords
FR-5	Authorization	<ul style="list-style-type: none">• API Keys• Basic Auth• HMAC
FR-6	Audit tracking	<ul style="list-style-type: none">• Financial data• Transaction• Backup of data
FR-7	Administrative functions	<ul style="list-style-type: none">• Preserving, Restoring, Maintaining, and Protecting data of the species
FR-8	External interfaces	<ul style="list-style-type: none">• Creating community• Contributors• Texture, pattern, structural pattern in natural objects.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Our solution is intended for wide range of users including Biologist, Naturalist, Ecologist with different goals.
NFR-2	Security	Multiple ways of authentication to maintain user data and data about species, also avoid unauthorized access and modification. Better encryption, authentication and authorization.
NFR-3	Reliability	Framework for creating digital devices that support the exploration of species behaviours in the wild.
NFR-4	Performance	Transfer learning approach to improve accuracy and performance of the application.
NFR-5	Availability	This application is available to use offline and online and also it will meet all the requirements of the users with better services.
NFR-6	Scalability	With the help of cloud services, a greater number of users can access the application seamlessly without any interrupts or errors.