

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

Date	03 October 2022
Team ID	PNT2022TMID27577
Project Name	Project - 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"><li>• Registration through Form</li><li>• Registration through Gmail</li><li>• Registration through LinkedIN</li></ul>
FR-2	User Confirmation	<ul style="list-style-type: none"><li>• Confirmation via Email</li><li>• Confirmation via OTP</li></ul>
FR-3	Transactions	<ul style="list-style-type: none"><li>• Through UPI, Credit/Debit cards and Net Banking.</li></ul>
FR-4	Authentication	<ul style="list-style-type: none"><li>• Through OTP sent to mobile.</li><li>• Users created secured passwords.</li></ul>
FR-5	Authorization	<ul style="list-style-type: none"><li>• Basic Authorization</li></ul>
FR-6	Administrative functions	<ul style="list-style-type: none"><li>• Adding, Updating and Maintaining description</li><li>• data about various species.</li></ul>
FR-7	External interfaces	<ul style="list-style-type: none"><li>• Easy to access UI</li><li>• Community for discussions</li></ul>

### Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Our solution is demanded for scientific researchers Such as Ornithologists , Zoologists in order to predict and analyse about flora and fauna.
NFR-2	<b>Security</b>	Authentication process involves multilayer security to make user data and collected data more secure, also to avoid unknown authorization and data integrity issues. Most security methods include Encryption and Authorization.
NFR-3	<b>Reliability</b>	Our framework should be reliable to cover wide range of species spanning across various habitats.
NFR-4	<b>Performance</b>	Data Augmentation to increase dataset size along with transfer learning to increase accuracy and performance for better working of applications.
NFR-5	<b>Availability</b>	Our application possess full-time service (either offline or online) and the dataset is constantly updated.
NFR-6	<b>Scalability</b>	Our application supports large number of concurrent users without any hurdles or errors through scaled cloud resources.