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

Date	28 October 2022
Team ID	PNT2022TMID20992
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	Sub Requirement
FR-1	Classification:	It identifies the "class," i.e., the category to which the image belongs. Note that an image can have only one class.
FR-2	Navigation Service	GPS
FR-3	Database	IBM Cloud
FR-4	Localization:	It helps in placing the image in the given class andcreates a bounding box around the object to show its location in the image
FR-5	Detection	It helps to categorize the multiple objects in the image and create a bounding box around it to locate each of them. It is a variation of the classification wit localization tasks for numerous objects
FR-6	Final Output	Final description of the image captured

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	This tool verifies that usability is a special and important perspective to analyze user requirements, which can further improve the tool quality. In the model process with user experience as the core, the analysis of users' usability can indeed help designers better understand users' potential needs, behavior and experience.
NFR-2	**Security**	By identifying the danger and poisoning flora and fauna. which the human become more secure from the attack by animals.
NFR-3	**Reliability**	The conventional computer vision approach of image recognition is a sequence of image filtering, segmentation, feature extraction, and rule -based classification. The images from the created dataset are fed into a neural network algorithm. This is the deep or machine learning aspect of creating an image recognition model. The training of an image recognition algorithm makes it possible for

		convolutional neural networks image recognition to identify specific classes.
NFR-4	**Performance**	The front page load time will be no more than 5 seconds for users that access the application.
NFR-5	**Availability**	The application will be available 99 % of the time ina month
NFR-6	**Scalability**	By using this tool user understand about the particular thing when they don ’t have the knowledge in that thing, Which this software available 24/7 through online