

Project design phase –II

Solution requirements(functional & non functional)

date	29 november 2022
Team id	PNT2022TMID46270
Project title	Digital Naturalist-AI Enabled Tool for Biodiversity Reachrs

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
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	Tagging:	It is a classification task with a higher degree of precision. It helps to identify several objects within an image.
FR-3	Localization:	It helps in placing the image in the given class and creates a bounding box around the object to show its location in the image
FR-4	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 with localization tasks for numerous objects.
FR-5	Semantic Segmentation:	Segmentation helps to locate an element on an image to the nearest pixel.
FR-6	Instance Segmentation:	It helps in differentiating multiple objects belonging to the same class.

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	Training the model using deep learning makes the tools more efficient in order the recognition the image by this it become reliability.