

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

Date	19 October 2022
Team ID	PNT2022TMID04689
Project Name	AI-based localization and classification of skin disease with erythema
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">✓ Build HTML page for login, Registration, Prediction, Log out.✓ YOLOV3 detector is real time object detection algorithm specify the objects in image.✓ Computer vision can gain high understanding of images.
FR-2	User registration	<ul style="list-style-type: none">✓ Registration through Gmail.✓ Registration using phone, laptop, computer.
FR-3	User confirmation	<ul style="list-style-type: none">✓ Confirmation via Email.✓ Confirmation via OTP
FR-4	User interface	<ul style="list-style-type: none">✓ User login form.✓ Admin login form.
FR-5	Database	<ul style="list-style-type: none">✓ It collects at least 50 images of each type of skin disease placed them in folder.✓ Using a chrome extension such as batch downloader where you can search and download images from chrome
FR-6	Data server	<ul style="list-style-type: none">✓ It connects a data from chrome and the application to the cloud.✓ Data server has been installed to run as a service and is deployed in IBM cloud instance

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none">✓ YOLO trainer model can help the dermatologist to detect whether the patient have skin disease or not.✓ Visual object tagging tool (VOTT) can annotate images for understanding.
NFR-2	Security	<ul style="list-style-type: none">✓ It ensure about patient safety during process.

		<ul style="list-style-type: none"> ✓ Careful examine about choosing an image for detecting or uploading images of your damaged skin
NFR-3	Reliability	<ul style="list-style-type: none"> ✓ Easy to use with good network connection,Accuracy. ✓ Less time consumption. ✓ Low cost.
NFR-4	Performance	<ul style="list-style-type: none"> ✓ Creating a model with an application can be very helpful to the people who are affected by skin disease. ✓ The trained model can predict an accurate result and took less time when compare to reality .
NFR-5	Availability	<ul style="list-style-type: none"> ✓ Easy to detect even when there is many images of skin which accurate results. ✓ Helps to get correct treatment at a correct time, which helps patients to heal earlier. ✓ Make use the application at anytime with proper guidelines.
NFR-6	Scalability	<ul style="list-style-type: none"> ✓ This method is ensure d accurate information about patients skin disease. ✓ patient need not to be worried about their condition .