

PROJECT DESIGN PHASE II

SOLUTION REQUIREMENTS

(FUNCTIONAL & NON FUNCTIONAL)

Date	13 october2022
Team ID	PNT2022TMID47686
Project Name	Project-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)
FR-1	Application building	<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 ensured accurate information about patients skin disease. ➤ patient need not to be worried about their condition.

