

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

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	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	Registration through Gmail. Registration using phone, laptop, computer.
FR-3	User confirmation	Confirmation via Email. Confirmation via OTP
FR-4	User interface	User login form. Admin login form.
FR-5	Database	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	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.• 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.