

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID23662
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 / Sub-Task)
FR-1	<b>User Registration</b>	Registration through Mobile Number Registration through Google Account Registration through Form Registration through LinkedIn
FR-2	<b>User Confirmation</b>	Confirmation via Email Confirmation via OTP Confirmation via Call
FR-3	<b>User Password</b>	Make him/her to set a strong password
FR-4	<b>User Profile</b>	User will provide their medical details and save in the system
FR-5	<b>Patient Image Capturing Process</b>	Provide Access to Capture Image Through Camera Provide Access to Upload Image Through Gallery Provide Access to Upload Image Through Drive
FR-6	<b>Output Analysis</b>	Image will be processed through YOLO and other trained model
FR-7	<b>Provides Description</b>	Gives detailed description about the type of skin disease affected
FR-8	<b>Patient Medicine Reminder</b>	Remind patients to take their Medicines/ointments at right time through reminder alarm.
FR-9	<b>Suggestion Box</b>	Patients can take suggestions from the Doctors through Chats.
FR-10	<b>Flareup Cycles</b>	Patients can know their medicine level from doctors through message.

## Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Our web application is user friendly as it just requires a simple registration process and to upload patient's skin image to get results.
NFR-2	<b>Security</b>	As we are suggesting the user to set a strong password security of the user is ensured
NFR-3	<b>Reliability</b>	As we have trained our model with the images taken from a trusted dermatological site our website will be more reliable.
NFR-4	<b>Performance</b>	We have annotated the images and trained our model using YOLO algorithm so the performance of our model is good. Performance is very high as it provides results with high accuracy and precision.
NFR-5	<b>Availability</b>	The website will be accessible on any browser like Chrome, Firefox etc... So, it is accessible at anywhere and at any time. All authorised users can access and view the medical reports of patients.
NFR-6	<b>Scalability</b>	The scalability is increased by giving back the input images from the user back to the model. By this the dataset gets increase which in turn increase the performance of the model.