

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

Date	15 October 2022
Team ID	PNT2022TMID34120
Project Name	AI-based localization and classification of skin disease with erythema
Maximum Marks	4 Marks

Functional Requirements:

These are the requirements that the end user specifically demands as basic facilities that the system should offer. All these functionalities need to be necessarily incorporated into the system as a part of the contract. These are represented or stated in the form of input to be given to the system, the operation performed and the output expected. They are basically the requirements stated by the user which one can see directly in the final product. 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">• Registration through Form• Registration through Gmail• Registration using phone, laptop, computer
FR-2	User Confirmation	<ul style="list-style-type: none">• Confirmation via Email• Confirmation via OTP
FR-3	User Profile	<ul style="list-style-type: none">• Users provides their medical history
FR-4	User Interface	<ul style="list-style-type: none">• User login form• Admin login form
FR-5	User Uploads Images (Input)	<ul style="list-style-type: none">• Upload Images as jpeg• Upload Images as png
FR-6	Output Analysis	<ul style="list-style-type: none">• Output analyzed through trained model

Advantages

- It allows you to determine if the application has all the functionalities specified in the functional requirements.
- The most cost-effective time to correct errors is during the functional requirement gathering stage.

Non-functional Requirements:

These are basically the quality constraints that the system must satisfy according to the project contract. The priority or extent to which these factors are implemented varies from one project to other. They are also called non-behavioral 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">• Used to classify skin disease with erythema
NFR-2	Security	<ul style="list-style-type: none">• It ensures about patient safety during process• It prevents unauthorized individuals from accessing user's data
NFR-3	Reliability	<ul style="list-style-type: none">• Even with more users, there will be a good performance without failure• Less time consumption
NFR-4	Performance	<ul style="list-style-type: none">• With greater accuracy, the performance is high• 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">• With a good system, all authorized users can access it• Helps to get correct treatment at a correct time, which helps patients to heal earlier
NFR-6	Scalability	<ul style="list-style-type: none">• Performance will be good even with the higher user traffic

Advantages

- They ensure the software system follows legal and adherence rules.
- They ensure good user experience, ease of operating the software, and minimize the cost factor.