

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	14 October 2022
Team ID	PNT2022TMID12576
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
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	User registration via form using email ID and Password
FR-2	User Confirmation	Confirmation via Email
FR-3	User Login	Using the registered email ID and Password as login credentials
FR-4	Profile Dashboard	Viewing the profile, Changing Password and Previous Records
FR-5	Checking For Diabetic Retinopathy	Uploading the FUNDUS Image of the eye to predict the disease
FR-6	User Tracking	Maintaining the Record of how far the eye has been affected
FR-7	Feedback & Support	Collection of feedback whether the results were accurate enough

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">● The system should have a quality attribute that must be able to assess the ease of the usage of the UI.● The system should not expect any technical prerequisites from the user's side.
NFR-2	Security	<ul style="list-style-type: none">● User details and login credentials should be safe and secure.● The confirmation of a valid user is required for authentication.
NFR-3	Reliability	<ul style="list-style-type: none">● Portable and cross-platform independent.● The application should be subjected to an experiment, test, or measuring procedure that yields the same results on repeated trials.● Easy to use and flexible.
NFR-4	Performance	<ul style="list-style-type: none">● The system should handle the traffic efficiently and service requests while consuming less bandwidth.● The accuracy of the result of a measurement, calculation, or specification should be dependent on the datasets.● The page should not take a lot of time to load the contents and display them.
NFR-5	Availability	<ul style="list-style-type: none">● The version of the application should be available even at the time of maintenance and updating.● The system should run 24 hours a day, 7 days a week [24/7 available].
NFR-6	Scalability	<ul style="list-style-type: none">● The application should be in the way of adding new functionalities or modules without affecting the existing functionalities.● The system should be able to manage numerous users at a time and be less prone to errors.