

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

Date	15 October 2022
Team ID	PNT2022TMID23190
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	Registration through Google Forms Registration through Gmail
FR-2	User Confirmation	Confirmation via OTP Confirmation via Mail
FR-3	Describe what the product does	Our project performs Image pre-processing and early detection of DR.
FR-4	Focus on user requirements	Reduce the risk of vision loss and creates awareness about the current stage of DR.
FR-5	Usually defined by user	Fundus image obtained from operators.
FR-6	Define product features	Deep learning algorithms and cloud database.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User friendly interface that can be accessed with ease by users.
NFR-2	Security	Permission granted only by the administrator of the system.
NFR-3	Reliability	If the system update fails or bugs in the code even though the system can roll back to its initial state.
NFR-4	Performance	The image loading process takes only 2 second. If the internet connectivity is good, it can be accessed by more than 10,000 people at a time.
NFR-5	Availability	The treatment should be available at low cost so that everyone with DR can find it beneficial.
NFR-6	Scalability	By processing more datasets for the reference of DR detection.