

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

Date	22 October 2022
Team ID	PNT2022TMID12524
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	The user can register to the website through either email id or phone number with a new password for their account.
FR-2	User Confirmation	The existing user can directly login to the site by giving the Login credentials.
FR-3	Admin Login	The Admin can login to the site where he/she can find the analysis to the predicted data.
FR-4	Image Uploading	Upload their eye retina image to the webpage to predict the result
FR-5	Conclusion Report	Get diagnosis results on the application and follow up with treatments.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Any user, whether literate or illiterate, should be able to utilise the product with ease. People who are elderly and suffering from DR can also use this tool for diagnosis.
NFR-2	Security	In order to store client data securely, data security is crucial. Information shouldn't be disclosed to the public.
NFR-3	Reliability	Should present cutting-edge results for reliably identifying images in accordance with the clinical five-grade grading system for diabetic retinopathy, as well as innovative results for five alternative screening and clinical grading systems for the disease.
NFR-4	Performance	Deep Learning's capacity to do pattern recognition by constructing intricate connections based on input data and comparing them to performance standards is a significant step toward rapid diagnosis.

NFR-5	Availability	This technology makes healthcare more accessible, affordable, and of high quality. The product must be accessible to a wide range of consumers.
NFR-6	Scalability	The product must hold stable even when multiple users are using it at the same times.