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

Date	16 October 2022
Team ID	PNT2022TMID48925
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	To get user image and to maintain a user or patient profile	Able to store user data and update it and protect it easily.User should be able to Upload images easily
FR-2	Image analysis	The image must be analysed and Incase of poor image quality a request for re upload or Try Upscaling the image
FR-3	Diagnosis of Diabetic Retinopathy	The Diagnostic must be accurate and the training model must have an accuracy over 90%(greater than current manual method)
FR-4	Report And Suggestions	The report must be simple for user to understand and should provide the user to send the report to medicinal professional without much hassle
FR-5	Evaluation	The results must be analysed and user must be tracked until proper treatment is given(User should have the ability to deny the tracking and suggestion)

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Easy to use and easy to navigate web service
NFR-2	**Security**	Must protect the user data
NFR-3	**Reliability**	Must be able to produce accurate results with near to zero error margin
NFR-4	**Performance**	Must be able to analyse and send report in Hour or less
NFR-5	**Availability**	Must be available widely through the use of cloud so no stress is on local machines and easy access from remote screening centers
NFR-6	**Scalability**	The core system needs to be easily modifiable and remove error and other addons that increase accuracy or time reduction