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

Date	10 October 2022
Team ID	PNT2022TMID29696
Project Name	Project - 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	Identifying the population eligible for screening	Use registries to ensure that people's details are collected and current, and decide which group needs to be tested based on the best available evidence.
FR-2	Invitation and information	Invite the entire cohort to the screening, and provide information that is appropriate for each group. To facilitate participation with knowledge
FR-3	Testing	Conduct screening test(s) using agreed/recommended Methods
FR-4	Referral of screen positives and reporting of screen-negative results	Send all positive findings from the screen to the appropriate services.additionally, ensure that screen negatives are communicated to People who continue to participate in the screening program
FR-5	Diagnosis	Diagnose true cases and identify false positives
FR-6	Treatment	Correctly intervene and treat situations; in some circumstances, surveillance or follow-up may also be necessary
FR-7	Outcomes	Identify false negatives and increase the performance and cost-efficiency of the screening program by gathering, analyzing, and reporting results.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	New findings for five distinct screening and clinical grading systems for diabetic retinopathy are presented. incorporating cutting-edge outcomes for precisely identifying photographs based on clinical five-grade diabetic retinopathy
NFR-2	**Security**	AI-powered deep learning can increase precision around delicate organs and tissues, minimize blood

		loss, infection risk, and discomfort during detection and screening.
NFR-3	**Reliability**	Deep Learning's capability to do pattern recognition by building complex associations based on input data and comparing them to performance standards is a significant advancement.
NFR-4	**Performance**	Simply said, AI is the ability to complete a task. primarily performed by a robot or computer, with the involvement of people. common templates for illustrating retinal findings that could be improved accuracy of results recorded.
NFR-5	**Availability**	Health care affordability, quality, and accessibility Can be amplified using this technology.
NFR-6	**Scalability**	In order to make high-quality systematic diabetic retinopathy screening a universal Offer to all persons with diabetes, it is possible to expand on existing systems and use a stepwise approach to enhancing the efficacy of present techniques.