

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

Date	22 October 2022
Team ID	PNT2022TMID17456
Project Name	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 and selecting dataset	To improve the model's performance, the right dataset must be chosen.
FR-2	Invitation and information	Invite the whole cohort to the screening, and provide information that is suitable for each group. to make participation with knowledge possible.
FR-3	Training	The libraries required for the model's training must be imported.
FR-4	Diagnosis	Determine the false positives and diagnose real cases.
FR-5	Testing	To determine if the model is properly trained to forecast the medical condition, run screening tests on several sets of data.
FR-6	Reporting	Report the results to find false negatives and boost the screening program's efficacy.
FR-7	Intervention/Treatment/Followup	Testing the model enables us to choose the best course of action.

**Non-Functional Requirements:**

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

FR NO:	Non-Functional Requirement	Description
FR-1	Usability	The system may be used by anybody with a basic awareness of the medical condition and computing skills. User-friendly interface that is simple for people to access.

FR-2	Security	Deep learning AI can be more accurate when detecting sensitive organs and tissues while also minimising blood loss, infection risk, and discomfort.
NFR-3	Reliability	When the testing data is more disparate, there is a possibility of hardware malfunction or false positives.
NFR-4	Performance	Even if the system may rollback to its original state if a system upgrade fails or there are faults in the programming. The model's performance is intended to provide patients with quick results.
NFR-5	Availability	The treatment should be available at low cost so that everyone with DR can find it beneficial.
NFR-6	Scalability	processing more datasets for DR detection reference.