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

Date	03 October 2022
Team ID	PNT2022TMID35818
Project Name	Project - A Gesture- Based Tool for Sterile Browsing of Radiology Images.
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 Form • Registration through Gmail • Registration through LinkedIN
FR-2	User Confirmation	• Confirmation via Email • Confirmation via OTP
FR-3	Skin Colour Detection	• Filter out all object do not contain the colour of the skin. • Focuses on hand detection and gesture • recognition by eliminating background objects.
FR-4	User Satisfaction	• Satisfaction by High success rate. • User friendly and ensure easy handling. • Surgery without Infection.
FR-5	User Preferences	• Perform adjustment according to user's dominant hand. • Accurate detection in all environment lightings.
FR-6	Object Location	• Upon detection, the system shall be able to compute the location of the object.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	• It requires training before using and can be used by both technical and non technical people since it is easy to understand.
NFR-2	**Security**	• Patient's details are stored securely in network and need proper permission to access the Network. Thus Data privacy and security is ensured.
NFR-3	**Reliability**	• More Features can be added and Convenient to use. • Can be operated in all lighting condition. • Ability to detect user's hand at any distance.
NFR-4	**Performance**	• Uses video, audio and behavioral data to better understand the connection between Patient, Disease and treatment. • Reducing the computational complexity using CNN provide better performance.
NFR-5	**Availability**	• While it is currently has a relatively limited role in direct patient care, its evolving role in complex clinical decision making is foreseeable.
NFR-6	**Scalability**	• Scalable management of data and models to overcome data scarcity and collection challenges. • Scalable algorithms and infrastructure. • Enterprise scalability of AI development and deployment