

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

Date	20 October 2022
Team ID	PNT2022TMID53360
Project Name	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 Experience	A responsive UI/UX shall be designed to help users interact with the system by using a cohort of hand gestures
FR-2	Cloud Deployment	The system shall deploy the trained CNN on the cloud.
FR-3	Hand Gesture Identification	The system shall be able to classify the images of hand gestures captured by a camera.
FR-4	Application Domain Pertinence	The CNN used by the system shall be trained on data that is relevant to the application domain.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The system shall act as an arbitrator between the user and the deep learning model.
NFR-2	<b>Security</b>	The system shall only permit authorized users to access the system. The system shall prevent unauthorized users from entering the system.
NFR-3	<b>Reliability</b>	The system shall be in the operational mode for at least 361 days in a year (Uptime of 99%). In case of failure, the system shall be able to recover in under 3-5 seconds.
NFR-4	<b>Performance</b>	The system shall be able to respond to a user gesture in under 3-5 seconds.
NFR-5	<b>Availability</b>	The model shall be available for public use as long as it remains operational.
NFR-6	<b>Scalability</b>	The system shall be accessible to over 5,00,000 - 1,000,000 concurrent users without any loss of performance.