

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID19926
Project Name	Gesture based tool for sterile browsing of radiology images.

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Image capturing through Canon 3D camera.	User's hand gestures are captured through canon camera which is pre-trained based on the model.
FR-2	Image displaying monitor	Based on the command or information from the camera the radiology image displaying monitor reacts.
FR-3	Gestix software tool	Dynamic navigation gestures are translated to commands based on their relative positions on the screen.
FR-4	Web page	In web page the images are uploaded and it recognizes based on the training with pre models.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	This system is easy to use since the users will not move from their work place.
NFR-2	Security	It includes various biometric sensors for security and the biometric features are unique to individuals and there is little possibility that the reference pictures can be replaced or altered.
NFR-3	Reliability	Gestures are accurately recognized by using ML and AI algorithms which makes the system more reliable.
NFR-4	Performance	The system recognizes the images in a few milliseconds and the output is displayed.
NFR-5	Availability	The new program, which is available as a free download, requires no special hardware, just a standard webcam and the NPointer software.
NFR-6	Scalability	The proposed solution improves the experience of user by quality of the work and from deviating.