

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	24 October 2022
Team ID	PNT2022TMID34450
Project Name	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning.
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	Camera Installation	Cameras should be installed inside water and in the walls of the building.
FR-2	Sensor Installation	Installed under the water without disturbing the people.
FR-3	Deduction	Either not moving or in unconscious state
FR-4	Alert	Sends an alert message to the lifeguard.
FR-5	Support	Lifeguard help or swim tubes.
FR-6	Alarm	Rings alarm with drowning detected.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	When someone is drowning, the sensor detects and locate the swimmer who is drowning and alert the people.
NFR-2	Security	Lifeguards will be present in the pool and the cameras are secured by the management and are safe.
NFR-3	Reliability	The process will be a reliable multimedia video-based surveillance system.
NFR-4	Performance	The alarm is triggered when the swimmer is detected as drowning.
NFR-5	Availability	Detection equipment includes safety wheel, pool hook, rescue tubes, first aid box etc.

NFR-6	Scalability	Virtual eye lifeguard detects potential drownings and promptly notifies you. It features the latest artificial intelligence technology and adapts to the needs of the user.
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