

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

Date	05 November 2022
Team ID	PNT2022TMID00309
Project Name	VirtualEye - 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	Installation	Should fix the cameras underwater and in the ceilings
FR-2	Detection	Note when there's terrifying reaction and unconsciousness
FR-3	Alert System	Warn/Intimate the lifeguards immediately
FR-4	Audio/Video feeds	Use it for reference data
FR-5	Support	Use swimming tubes and guidance of lifeguard

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	System should be used by knowing all the features appropriately and using it effectively.
NFR-2	Security	The video feeds should not be used for other purposes
NFR-3	Reliability	Immediate action should be taken after the trigger of warning
NFR-4	Performance	Accurate results should be provided
NFR-5	Availability	The monitoring should be done continuously while the pool is being used anytime. Also vests and tubes for rescue should be there.
NFR-6	Scalability	The system should be cost effective. It should be practically implementable.