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

Date	26 October 2022
Team ID	PNT2022TMID12092
Project Name	Virtual eye – lifeguard for swimming pools for 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	Needed to be fixed under the water without Creating any disturbance to the people in the swimming pool.
FR-2	User registration	Register via Email/Phone number and get verified for further use
FR-3	Deduction	Either not moving or in unconscious state
FR-4	Support	Take swim tubes or take the help of rescuer.
FR-5	Alert	Set alarm and send message through the application to life guard.
FR-6	Output	Vision based monitor Image, position and movement detection Drowning is detected Resue drowning people by Life Guard

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	To ensure the safety of each and every person present in the pool. A Lifeguard should be present all the time in the pool.
NFR-2	**Security**	Lifeguards should be aware of the alert message to save the life of the swimmer.
NFR-3	**Reliability**	Virtual eye lifeguard triggers an immediate prior alarm if a swimmer is in peril, helping to avoid panic even in critical situations.

NFR-4	**Performance**	The alarm is triggered when the swimmer is detected as drowning
NFR-5	**Availability**	Equipment and accessories include lifesaver rings, inflatable vests, aShepherd's Crook, life hooks, spine boards, rescue tubes, and a first aid kit. Remember to keep them accessible to quickly pull someone from the water safely.
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.