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

Date	03 October 2022
Team ID	PNT2022TMID45666
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	Installation	First we should Needed to be fixed in the underwater of the swimming pools without creating any disturbance to the people
FR-2	Deduction	Detect the person in the swimming pool who is either horrified or in an unconscious stage.
FR-3	Support	Take swim tubes or take the help of rescuer
FR-4	Audio system	Send an audio alert via audio system in the swimming pool
FR-5	Prior Alert	Send alert message to the lifeguard

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's pulse rate is decreasing or increasing
NFR-5	Availability	Equipment include lifesaver rings,rescue tubes, inflatable vests, aShepherd's Crook, life hooks, spine boards, and first aid kit etc Remember to keep them near the swimming pool.
NFR-6	Scalability	Virtual eye lifeguard detects potential drownings and promptly notifies you. It features the latest artificial intelligence Technology , machine learning , deep learning etc and its easily adapts to the user.