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

Date	15 October 2022
Team ID	PNT2022TMID33743
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	Sub Requirement (Story / Sub-Task)
FR-1	Installation	Needed to be fixed under the water withoutCreating an disturbance to the people in the swimming pool.
FR-2	Deduction	Either not moving or in unconscious.
FR-3	Audio	Alert the life guard for help or rescue.
FR-4	Support	Take swim tubes or take the help of rescuer.
FR-5	Pulse rate sensor	Detect the pulse rate of a swimmer.
FR-6	Prior Alert	Send alert message to the lifeguard.
FR-7	Alert	Set alarm and send message through the application to life guard.

Non-functional Requirements:

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

FR	No.No Functional Requirement	Description

NFR-1	**Usability**	To ensure the safety of each and every person present in the pool. A Lifeguard should be all the time in the pool.
NFR-2	**Security**	Lifeguards should be aware of the alert message to save the life of the swimm
NFR-3	**Reliability**	Virtual eye lifeguard triggers an immediate alarm if a swimmer is in peril, helping to avoid paniceven in critical situations.
NFR-4	**Performance**	The alarm is triggered when the swimmer’s pulserate is decreasing.

present

prior

NFR-5	**Availability**	Equipment and accessories include lifesaver rings,inflatable vests, aShepherd's Crook, life hooks, spineboards, rescue tubes, and a first aid kit. Remember to keep them accessible to quickly pull someonefrom 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.