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

Date	15 October 2022
Team ID	PNT2022TMID30641
Project Name	Virtual Eye - LifeGuard For Swimming Pools To Detect
Maximum Marks	4 Marks

Functional Requirements:

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

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	Pulse rate sensor	Detect the pulse rate of a swimmer
FR-4	Support	Take swim tubes or take the help of rescuer
FR-5	Audio system	Send an audio alert via audio system in the swimming pool.
FR-6	Prior Alert	Send alert message to the lifeguard

Non-functional Requirements:

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

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 of 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.