Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID32676
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 Requirements (Epic)	Sub Requirement (Story/Sub- Task)
FR-1	Installation	Camera will be fixed under the water in the swimming pool.
FR-2	Deduction	In unconscious or nervous
FR-3	Audio	Will be calm if the person is unconscious or ask for help
FR-4	Support	Take the help from medical team
FR-5	Prior Alert	Alert message sends to the rescue team
FR-6	Pulse rate sensor	To detect the pulse rate of a swimmer

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	To provide safety for every person in the swimming pool from drowning.
NFR-2	Security	An alarm will be there to alert and alert message will send to rescue team to save the live of the person in the swimming pool.
NFR-3	Reliability	Virtual eye lifeguard alerts immediately whenever it identifies drowning or identifies pulse rate of the person getting decrease.
NFR-4	Performance	The alert message is send immediately when the swimmer's pulse rate is decreasing
NFR-5	Availability	All necessary equipment like water tubes, ropes, first aid kit, life hooks will be available.
NFR-6	Scalability	Virtual eye lifeguard identifies drowning and it will alert immediately. It features the latest artificial intelligence technology and work with the need of the user.