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

Team ID	PNT2022TMID24569
Project Name	Virtual Eye - Life Guard for Swimming Pools toDetect 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	User Registration	Registration Via Email Registration Via phone number
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Installation of Camera	Locating the Swimmers position Monitor the Swimmers movement and detect the drowning person
FR-4	Alarm system	Alert the lifeguard by triggering the alarm
FR-5	Output	Vision based monitor Image, position and movement detection Drowning is detected Rescue 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**	User-Friendly
NFR-2	**Security**	By observing the swimmer's body movement and posture, our software has high security.
NFR-3	**Reliability**	Performing Vision based security system for all type of swimming pools
NFR-4	**Performance**	Using deep learning, image can be recognized. If the image is detected, it triggers the alarm to alert the Life Guard who rescue the drowning peoples
NFR-5	**Availability**	24/7 monitoring cameras
NFR-6	**Scalability**	Our software system can be used by the company driver who manages the pools. We use the IBM cloud server to collect and maintain the data. We will ensure the safety of the swimmers