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

Date	04 November 2022
Team ID	PNT2022TMID28987
Project Name	VirtualEye-Lifeguard for swimming pools to detect active drowning

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 through Form Registration through Gmail Registration through Linkedin
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Monitoring Aquatic Facilities	Detecting Temperature Detecting Breathing Rate Detecting Oxygen Level
FR-4	Detecting Drowning	Prediction of drowning person Sending alert to hospitals
FR-5	First Aid measures	Video demonstrating CPR activities
FR-6	Doctor Consultation	Virtual meeting with doctor for further first aid safety measures

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Alert of person Drowning is delivered in the means of speech synthesis in native language of lifeguards
NFR-2	**Security**	Data transmitted to lifeguards and hospitals is protected from third parties by means of encryption techniques
NFR-3	**Reliability**	Model is trained rigorously by providing huge dataset of drowning persons
NFR-4	**Performance**	Data is stored in cloud to provide faster bandwidth
NFR-5	**Availability**	Extending the dataset is carried autonomously and model is trained with new data's within an hour.
NFR-6	**Scalability**	Application is deployed on cloud to overcome the drawbacks of physical servers