

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID49865
Project Name	Virtual Eye – Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR - 1	Authentication	Email Id or Username Password
FR - 2	Confirmation of authentication	Confirmation via Email Confirmation via OTP
FR - 3	Authorization levels	User Administrator
FR – 4	External Interfaces	Camera Sound Alarm Automatic life jackets Device held by life guards
FR – 5	Demo	Video Pictures
FR – 6	Reservation	Rules and regulations Pool for who knows swimming Pool for who do not know swimming No. of adults No. of children Time period Need of pool guys for children

FR - 7	Payment	Credit card UPI payment QR scan
FR - 8	Feedback	Feedback through form

Non-functional Requirements:

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Simple and easy to use.
NFR-2	Security	Unauthorized access is denied for security purpose.
NFR-3	Reliability	After detection of active drowning, it immediately alerts the life guard by sound alarm and location of a drowning person and it also triggers automatic life jackets.
NFR-4	Performance	If the performance is high, the percentage of saving the drowning person will be high.
NFR-5	Availability	Alarm should be triggered till the drowning person is saved. Registration page should be user friendly and available in all the time. Emergency kits must be available in all the time.
NFR-6	Scalability	Registration can be done in any time. Supporting more users at the same time. Working of camera, alarm and automatic life jackets should be consistent and fast.