

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

Date	15 October 2022
Team ID	PNT2022TMID31103
Project Name	Project – Virtual Eye –life guard for swimming pools to detect 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 through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Person Detection	Using YOLO method
FR-4	Person Identification	Using opencv2,os,numpy
FR-5	Alert Trainer	Using play sound module
FR-6	Web Deployment	Using Flask

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Effectiveness, efficiency, and overall satisfaction of the user while interacting with the application
NFR-2	Security	Authentication, authorization, and encryption of the application
NFR-3	Reliability	Probability of failure-free operations in a specified environment for a specified time
NFR-4	Performance	How the application is functioning and how responsive the application is to the end-users
NFR-5	Availability	Without near 100% availability, application reliability and the user satisfaction will affect the solution
NFR-6	Scalability	The capacity of the application to handle growth, especially in handling more users.