

# **PROJECT DESIGN PHASE-I**

## **PROPOSED SOLUTION**

Team ID	PNT2022TMID16644
Project Name	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	2 Marks

### **PROPOSED SOLUTION:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Swimming is one of the best exercises that help people to reduce stress in this urban lifestyle. Even with a lifeguard observer on duty, swimmers may still have trouble in underwater or in parts of the pool beyond the lifeguard's field of view.
2.	Idea / Solution description	We make use of Artificial Intelligence in this project. We install the camera underwater to detect the drowning cases. Using deep learning, images can be recognized. When the images are detected, it triggers the alarm to alert the Life Guard who rescues the drowning peoples.
3.	Novelty / Uniqueness	Our project Novelty is our system software, which tracks the position and the location of a drowning person with the use of the YOLO Algorithm. It has high accuracy and fast detection speed, So it helps lifeguard to save people within few seconds.
4.	Social Impact / Customer Satisfaction	Higher death rates occur due to drowning and are also the third leading cause of unexpected deaths, especially among children under the age of five. Our major aim is to overcome this conflict of drowning. This will have a greater social impact.
5.	Business Model (Revenue Model)	Software-based approach is used for gaining more profit. It is extremely useful to lifeguards, swimmers and business operators. The inbuilt feature helps to increase the revenue of the organisation.
6.	Scalability of the Solution	The software system created can be used by the company, who manages the swimming pools. IBM cloud server is used to store and maintain the data to ensure the safety of the swimmers.

