Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID23045
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)	swimmers in the pool are detected using an overhead camera First, swimmers in the pool are detected using an overhead camera First, swimmers in the pool are detected using an overhead camera People visit the swimming pools to practice or to learn swimming. There is a possibility of someone drowning as they are new to these activities. So to detect the active drowning of the person, our "Virtual Eye" program is installed in the security cameras available in the swimming pool, and it detects an alarm, and thus alerting the lifeguards about the drowning. Thus a meticulous system is to be implemented along the swimming pools to save human life. By studying body movement patterns and connecting cameras to artificial

		intelligence (AI) systems we can devise a pool safety system that reduces the risk of drowning.
2.	Idea / Solution description	The proposed system makes a novel attempt to evaluate swimmers' conditions by analysing their motion and shape features via visual based monitoring device and an alarm to alert, and provides solutions in detecting drowning incidents. While challenging in many aspects, a successful system will bring inestimable value in saving human lives.
3.	Novelty / Uniqueness	Virtual eye has developed a novel idea of alerting the ambulance and another life guard if there is any delay in saving the person to death.

4.	Social Impact / Customer Satisfaction	Safety in water has been a concern for many centuries for the survival of human lives. No matter how watchful and dedicated lifesavers are, they are also humans. It's impossible for them to monitor every swimmer in a pool, at every minute. But it's vital to reach a drowning victim before it's too late and every second counts. Virtual eye plays an ideal role in timely rescuing of people caught in drowning thus saving a person's life from death
5.	Business Model (Revenue Model)	There are many products currently available in this regard. Our solution, once developed well, has enough possibility to become a good product to save drowning victims.
6.	Scalability of the Solution	Our proposed solution is very scalable i.e., in future, there are a lot of rooms for evolving our present model by adding new features to enhance our system in the future