Project Design Phase-I
Proposed Solution Template

Date	3 November 2022
Team ID	PNT2022TMID01606
Project Name	Virtual Eye - Life Guard for swimming pools to detect active drowning
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Drowning detection system that detects every dangerous situation and accident. This software works in close integration with the cameras installed in the pool to continuously scan the pool. This system can also able to record all the activities in the pools and to classify critical situations from normal ones in order to keep track of what happened. The built-in notification system produces alarms within 10 seconds on smartwatches, phones, flashing lights and other configurable devices. 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	This system by analyzing the movement and shape, evaluates swimmers' condition based on visual based monitoring device and an alarm to alert the lifeguards and provides solution 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	Drowning produces a higher rate of mortality without causing injury to children. Children under six of their age are found to be suffering the highest drowning mortality rates worldwide. Such kinds of deaths account for the third cause of unplanned death globally, with about 1.2 million cases yearly. To overcome this conflict, 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 an underwater pool safety system that reduces the risk of drowning.
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 forevolving our present model by Adding new features to enhance our system in the future.