Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID13390
Project Name	Project – VirtualEye – Life guard for swimming pools to detect active drowning
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Beginners feel it difficult to breathe underwater which causes breathing trouble which in turn causes a drowning accident. Drowning produces a higher rate of mortality without causing injury to children.
2.	Idea / Solution description	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.
3.	Novelty / Uniqueness	Such systems can be developed by installing more than 16 cameras underwater and ceiling and analysing the video feeds to detect any anomalies.
4.	Social Impact / Customer Satisfaction	To overcome this conflict, a meticulous system is to be implemented along the swimming pools to save human life.
5.	Business Model (Revenue Model)	As a POC we make use of one camera that streams the video underwater and analyses the position of swimmers to assess the probability of drowning, if it is higher than an alert will be generated to attract lifeguards' attention.
6.	Scalability of the Solution	The system is not designed to replace a lifeguard or other human monitor, but to act as an additional tool. "It helps the lifeguard to detect the underwater situation where they can't easily observe.