

**Project Design Phase-I**  
**Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMID35350
Project Name	Project - VirtualEye- Lifeguard for Swimming Pools to Detect Active Drowning
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Swimming as a recreational activity can be dangerous for novice swimmers. Patrolling the pool may be difficult for lifeguards on busy days. This makes crowded pools more prone to accidents like drowning.
	Idea / Solution description	AI that constantly monitors the pool area using underwater cameras and a functional alert system.
2.	Novelty / Uniqueness	Accurately tracks the location and condition of the victim using the YOLO v5 algorithm.
3.	Social Impact / Customer Satisfaction	People visiting the pool will feel reassured that there is constant monitoring to prevent any accidents. May help in reducing the drowning rate in local pools.
4.	Business Model (Revenue Model)	Install the system in all public pools and educate lifeguards on how to maintain and use the software.
5.	Scalability of the Solution	The data collected via IBM cloud can be used to improve the accuracy of the system if there are any discrepancies. The software can be customised according to each individual pool's requirements.