

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

Date	26 September 2022
Team ID	PNT2022TMID15283
Project Name	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)	Swimming pools are generally places of fun and healthy exercise, but they can be deadly as well. 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	In this project, we use Artificial Intelligence. We install the cameras in underwater to detect the drowning people. Using deep learning, image can be recognized. If the image is detected, it triggers the alarm to alert the Life Guard who rescue the drowning peoples
3.	Novelty / Uniqueness	Accurate pulse rate detection using Deep learning.
4.	Social Impact / Customer Satisfaction	In case of an incident it is possible to extract and store not only the videos but also Pulse rate of a victim so it will be useful to identify the reason behind his/her drowning.
5.	Business Model (Revenue Model)	We can introduce the software-based approach for making a good income. It is extremely useful to lifeguards, swimmers and business operators. The number of features makes it attractive for end users to use our software system.
6.	Scalability of the Solution	Our software system can be used by the company driver who manages the pools. We use the IBM cloud server to collect and maintain the data. We will ensure the safety of the swimmers.