

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID54220
Project Name	Virtual Eye- Lifeguard 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 places where people spend times to relax and enjoy their weekend with their family and friends. But it is not that all of them know swimming and is mandatory for swimming pools to have lifeguards on duty full time. Some worst cases the issue of drowning arises when the lifeguard is busy with some other works or apart from their view
2.	Idea / Solution description	In this project , we make use of AI . We install cameras in underwater to detect the people drowning by processing the image frames using deep learning . Once detected , an alarm is triggered in order to alert the lifeguard or people around them to seek help.
3.	Novelty / Uniqueness	The uniqueness of our project lies in precise locating of the person drowning underwater. We use an highly accurate algorithm called YOLO. It is very fast in detection so that helps lifeguards to react faster in saving lives
4.	Social Impact / Customer Satisfaction	Globally, the drowning is a very serious issue and especially among children . This project will have a huge impact in the concern for the society.
5.	Business Model (Revenue Model)	This can be introduced as a software to be more secure for the swimmers and pools that installed gets attracted by the people as safety standards maintained which will make this pool the more priority.
6.	Scalability of the Solution	Our project can be used by even the lifeguards who often get frustrated standing near the pool for hours and it can be used how big or small the pool may be . The number of cameras that need to be installed counts .