Project Design Phase-I
Proposed Solution
Template

Date	16 October 2022
Team ID	PNT2022TMID30844
Project Name	VirtualEye - Life Guard For Swimming Pools ToDetect Active Drowning
Maximum Marks	2 Marks

Proposed Solution:

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	The uniqueness of our system software to track the position and the location of a drowning person. We use YOLO Algorithm. Because of its high accuracy and fast detection speed. So it helps lifeguard to save people within seconds.
4.	Social Impact / Customer Satisfaction	Drowning globally has a higher death rate and is also the third leading cause of unexpecteddeaths worldwide, especially among childrenunder the age of six. To overcome this conflictour drowning detection system will have an impact on society.
5.	Business Model (Revenue Model)	We can introduce the software-based approachfor making a good income. It is extremely usefulto 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 usethe IBM cloud server to collect and maintain thedata. We will ensure the safety of the swimmers.