Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMI00640
Project Name	Project – Virtual Eye –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 is one of the best exercises that helps people to reduce stress in this urban lifestyle. Swimming pools are found larger in number in hotels, and weekend tourist spots and barely people have them in their house backyard. Beginners, especially, often feel it difficult to breathe underwater which causes breathing trouble which in turn causes a drowning accident. Worldwide, drowning produces a higher rate of mortality without causing injury to children. Children under six of their age are found to be suffering the highest drowning mortality rates worldwide. Such kinds of deaths account for the third cause of unplanned death globally, with about 1.2 million cases yearly.
2.	Idea / Solution description	To overcome this conflict, a meticulous system is to be implemented along the swimming pools to save human life. 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	Making 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 then an alert will be generated to attract lifeguards' attention.
4.	Social Impact / Customer Satisfaction	By the use of this technology , customers can feel secure to swim. Using this camera we can monitor the customer body movements so we can easily get back with them if they drown.

5.	Business Model (Revenue Model)	Swim Eye is a computer vision detection system for the prevention of drowning incidents in swimming pools.
6.	Scalability of the Solution	This is suitable for any swimming pools. New or Existing pools(for all shapes and sizes) and any construction type.