

# PROJECT DESIGN PHASE-I

## Proposed Solution:

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"><li>• Although swimming pools are often places to have fun and get some good exercise, they may sometimes be fatal.</li><li>• Swimming may be difficult underwater or in areas of the pool that are out of the lifeguard's line of vision, even when there is a lifeguard observer on duty.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>• We employ artificial intelligence in this project. We set up cameras underwater to spot persons who are drowning.</li><li>• Deep learning may be used to recognize images. If the image is found, an alarm is set out to notify the lifeguards who save drowning individuals.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>• The ability of our system software to locate and monitor a drowning individual in real time.</li><li>• The YOLO algorithm is used. because of its rapid detecting speed and great accuracy. Thus, it aids lifeguards in providing quick rescues.</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>• Globally, drowning has a higher mortality rate and ranks third among all sudden deaths, particularly among children under the age of six.</li><li>• Our drowning detection system will have an effect on society in order to resolve this dilemma.</li></ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"><li>• We can describe the software-based strategy for earning a good living. It is quite helpful for company owners, swimmers, and lifeguards.</li><li>• The variety of features makes using our software system appealing to end customers..</li></ul>

6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>• The business driver who oversees the pools can utilize our software solution.</li> <li>• We gather and keep the data on the IBM cloud server. The swimmers' security will be ensured.</li> </ul>
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