# Project Design Phase-I

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| Date | 14 November 2022 |
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| Team Members | J.Nagaraj(821019106018)<br>S.Naveen(821019106019)<br>U.Vignesh(821019106304) |
| Project Name | Virtual eye – lifeguard for swimming pools for active drowning |
| Maximum Marks | **8 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 unexpected deaths worldwide, especially among children under the age of six. To overcome this conflict our drowning detection system will have an impact on society. |
| 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. |