

## Project Design Phase-I

### Solution Architecture

Date	16 October 2022
Team ID	PNT2022TMID06492
Project Name	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	4 Marks

#### Solution Architecture:

- 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.
- Usually, such systems can be developed by installing more than 16 cameras underwater and ceiling and analysing the video feeds to detect any anomalies.
- We make 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.
- The system is not designed to replace a lifeguard or other human monitor, but to act as an additional tool.
- It helps the lifeguard to detect the underwater situation where they can't easily observe.

#### Solution Architecture Diagram:

