

## Project Design Phase-I

### Solution Architecture

Date	27 September 2022
Team ID	PNT2022TMID15283
Project Name	VirtualEye - Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	4 Marks

### Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions.

- Provide specifications according to which the solution is defined, managed, and delivered.
- 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.
- But AS a POC 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.

### Solution Architecture Diagram:

