

## Project Design Phase-I

### Solution Architecture

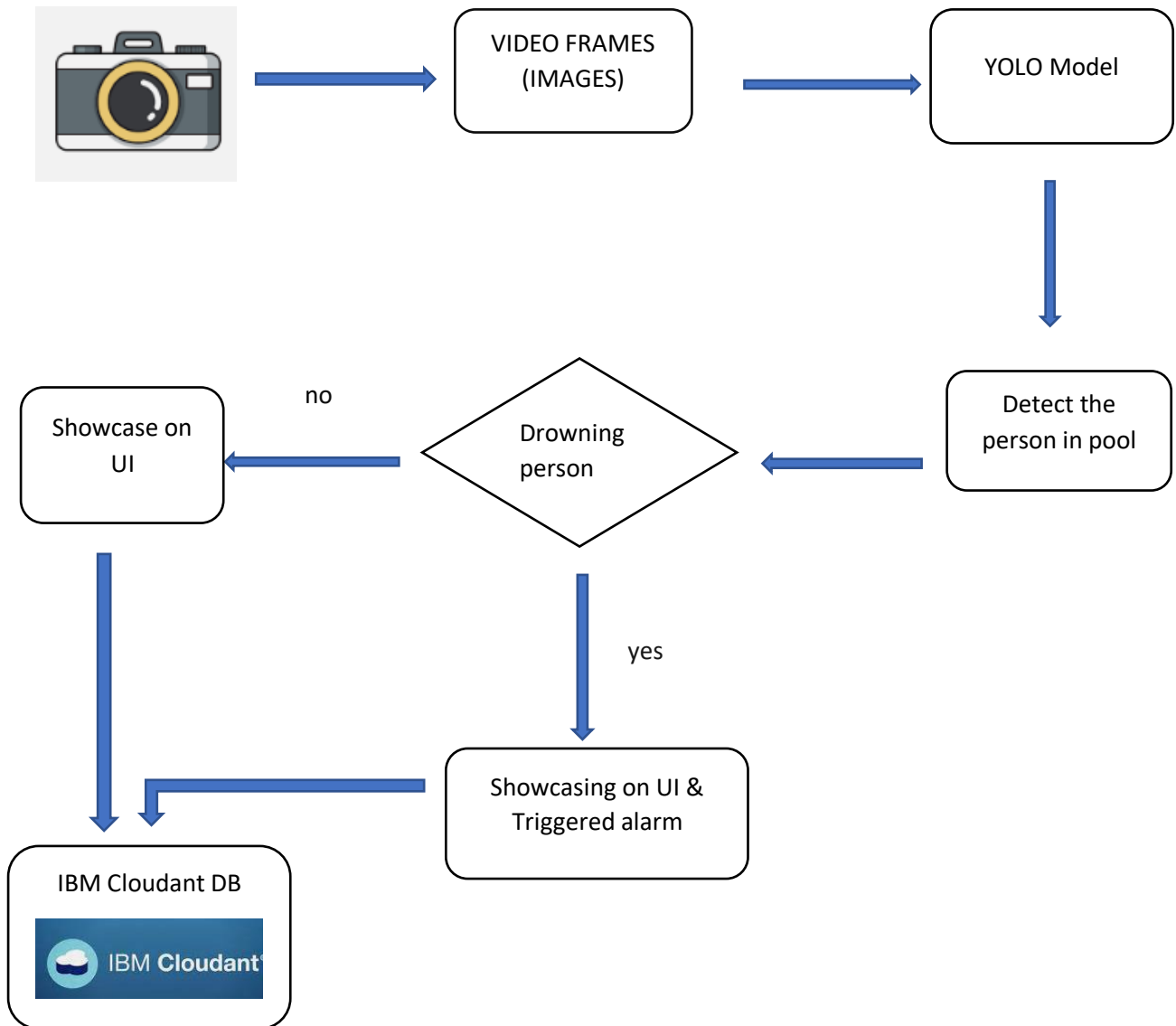
Date	18 October2022
Project Name	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	4 Marks

#### Solution Architecture:

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

- ☐ Find the best tech solution to solve existing business problems.
  - ☐ Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.
  - ☐ Define features, development phases, and solution requirements.
  - ☐ Provide specifications according to which the solution is defined, managed and delivered.
- We can design an underwater pool safety system that lowers the chance of drowning by analysing body movement patterns and integrating cameras with artificial intelligence (AI) systems..
  - Such systems are often created by mounting more than 16 cameras underwater and on the ceiling, then reviewing the video streams to look for any irregularities.
  - However, as a POC, we employ a single camera that transmits underwater video while analysing swimmer positioning to determine the likelihood of drowning; if it is higher, an alarm will be created to draw lifeguards' attention.

## Solution Architecture Diagram:



Team Leader –Muthuaruna C

Team Members:

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