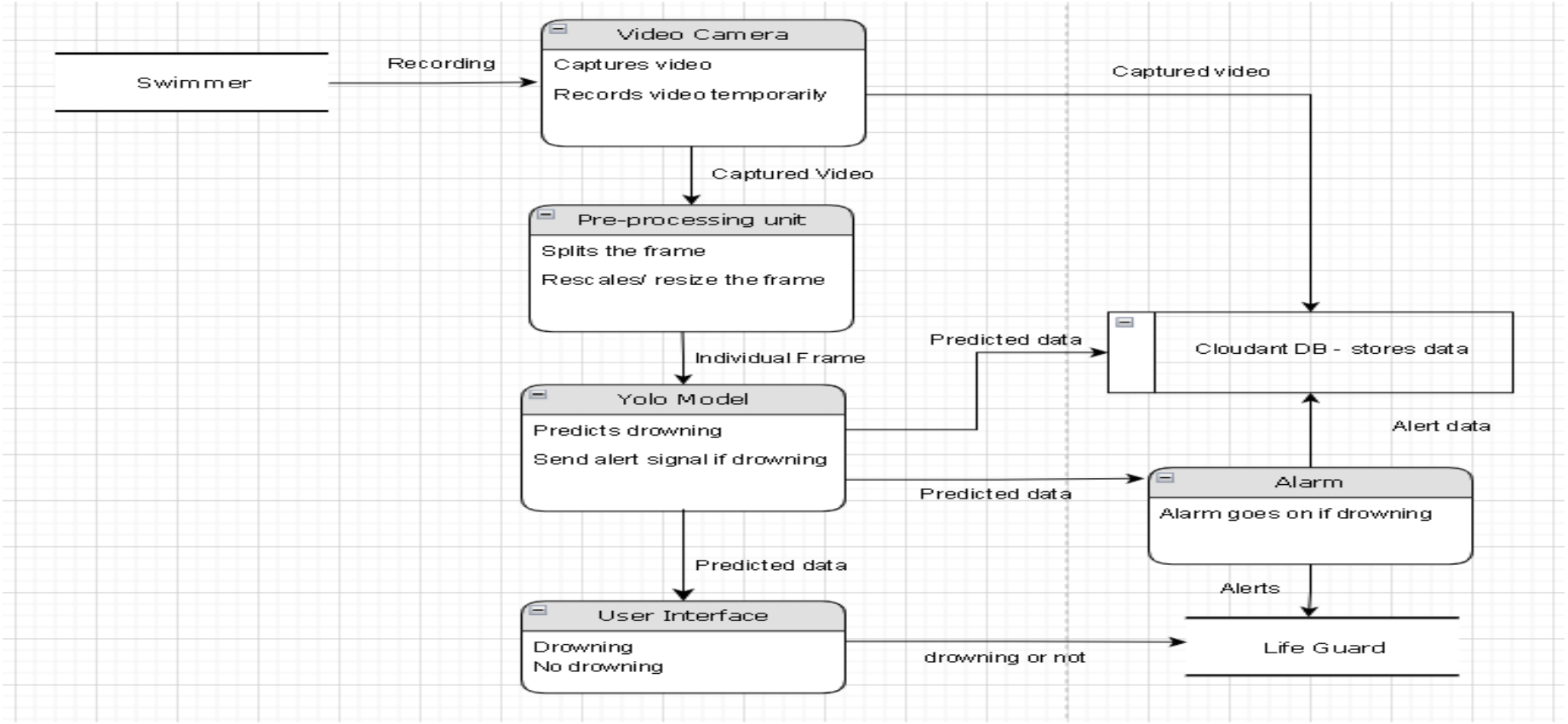
Project Design Phase-II
Data Flow Diagram & User Stories

Date	03 October 2022
Team ID	PNT2022TMID36007
Project Name	Virtual Eye - Drowning detection
Maximum Marks	4 Marks

Data Flow Diagram:



- The video of swimmers in a pool is recorded by the camera and is sent to the pre-processing unit and to the database
- The pre-processing unit splits the video into individual frames and resizes, enhances them.
- The pre-processed frames are sent to the YOLO model which predicts whether a person is drowning or not.
- The predicted data is sent to the Database, User Interface and to the alarming unit.
- If the prediction is positive the alarming unit goes on and the UI lights up , alerting the lifeguard.

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Swimmer	To be rescued	USN-1	As a user, I should be rescued from the swimming pool if I drown.	i should be rescued at any cost	High	Sprint-1
Swimmer's Kin	To rescue fast	USN-2	As a user, i want my kith and kin to be rescued from drowning as fast as possible	should detect drowning as early as possible	High	Sprint-1
Admin	To Delete/Manipulate	USN-3	As a user, I should be able to delete or manipulate the video data whenever I need.	Should allow all kinds of access to admin	Medium	Sprint-2
Lifeguard	Alert	USN-4	As a user, i need a noisy and easily palpable visual alert	Should provide alert in two ways - visual and auditory	High	Sprint-1
Admin	To Modify the model	USN-5	As a user, i should be able to modify the YOLO model with better data to get accurate prediction	Should have better accuracy, especially minimum (close to zero) false negative predictions.	Medium	Sprint-2
Lifeguard	Location	USN-6	As a user, i need the exact location of the person drowning to save as soon as possible	should be able to provide the exact location of the person	High	Sprint-1