Project Design Phase-II
Data Flow Diagram & User Stories

Date	03 October 2022
Team ID	PNT2022TMID53114
Project Name	VirtualEye - Life Guard System for Swimming Pools to Detect Active Drowning

Engage

In the core moments in the process, what happens?

Drowning Detection
System identifies when a swimmer is drowning

Alarm sounding
Alarms sound as a swimmer is identified to be drowning

Floatation device
Floatation device is thrown in the direction of drowning swimmer

Lifeguards are alerted
Lifeguards are notified to jump into the water and assist the swimmer

Call emergency number
if person has complications, call medical services

Floatation devices are thrown into pool

Pool is cleared out

Lifeguards jump into the pool to assist

Save patient without any casualties

Decrease cost of lifeguards, watchmen

Save patient without wasting any time

The system does not detect the drowning

The lifeguard does not recieve notification on time

Emergency services not responding

Alarm system malfunctions

Victim gets to a critical state

Hold regular meetings to think of new facilities to save swimmers

improve the ML model to more accurately detect drowning

Hire competent and proactive lifeguards

Exit

What do people typically experience as the process finishes?

Saved person is given care
a team of staff assists the person in recovery

family of saved person is informed
Family of the victim is informed of the incident

Make sure victim is taken care of

saved person thanks the pool owner and lifeguards

The victim is not able to recover

Victim dies on the way to hospital

Hire competent and proactive lifeguards

develop tie ups with ambulance services and hospitals

Extend

What happens after the experience is over?

Overall pool rating
Pool receives good ratings for increased safety

Lesser drowning incidents
The pool becomes a safer place for swimmers

More customers to The swimming pool
Since the safety standards are increased, more customers visit.

The media covers the event in a positive light

Media bashes the pool owner and business for failing to protect the swimmers

report successful rescue operations to media proactively.

recommend saved customers to give positive reviews to the system and pool