## Ideation Phase Empathize & Discover

Date	7 October 2022
Team ID	PNT2022TMID33743
Project Name	VirtualEye - Life Guard for Swimming Pools to
	Detect Active Drowning
Maximum Marks	4 Marks

## **Empathy Map:**

Swimming is one of the best exercises that helps people to reduce stress in this urban lifestyle. Swimming pools are found larger in number in hotels, and weekend tourist spots and barely people have them in their house backyard. Beginners, especially, often feel it difficult to breathe underwater which causes breathing trouble which in turn causes a drowning accident. Worldwide, drowning produces a higher rate of mortality without causing injury to children.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 analyzing 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.

## **Example:**

SwimEye is a computer vision detection system for the prevention of drowning incidents in swimming pools.

Our underwater cameras will monitor and track the movements of all swimmers in your pool. SwimEye works like an "extra lifeguard" under the water of your pool.

The alarm is also provided directly to pool lifeguards via portable The live colour video stream is automatically processed by our object recognition software.

AngelEye
LifeGuard is
customizable
according to
customer
needs.

The live video stream from our underwater cameras is automatically monitored by our "state-of-the-art" object recognition software

Lifeguards can visually assess the developing situation within seconds of the event first occurring it will raise a radio alarm to pool lifeguards and an visual alarm to our Monitoring & Control Station.

Does

SwimEye can provide very stable monitoring and highly effective drowning incident detection.

Feels

SwimEye is secure, private and customizable to be compliant with regional data protection and privacy regulations.

In the event of a serious drowning incident, SwimEye can warn lifeguards much earlier than compared to a pool without this technology.