

## PROJECT DESIGN PHASE - II

Date	13 October 2022
Team ID	PNT2022TMID51072
Project Name	Virtual Eye - Life Guard For Swimming Pools To Detect Active Drowning
Maximum Marks	2 Marks

### Functional Requirement

#### Monitor

Angel Eye cameras **detect the movements** of every swimmer in the pool.

#### Detect

The artificial intelligence of the Angel Eye software analyzes the images acquired by the cameras in real time and **identifies situations of danger or drowning**.

#### Alert

Lifeguards are promptly alerted to dangerous situations through smart watch technology or other signalling devices. **The image and exact position of the swimmer** in distress allows lifeguards to intervene immediately.

**Components** such as,

- **Angel Eye Camera**  
The eye of the Angel Eye system is an optical sensor that **optionally combines efficient LED lights** that can accurately track the movements of swimmers in the pool.
- **Aerial Cameras**  
  
Aerial cameras **cooperate with underwater cameras** to improve the reliability of drowning detection by identifying the position of swimmers in the water, whether on the surface or underwater.
- **Drowning Detection Software**  
  
The **scanning and modelling in 3 dimensions** realized in real time by the software, allows the identification of the exact position of people in water, which is important to set off alarms even near the surface and not only the bottom of the pool.
- **Alarm devices**  
Angel Eye integrates a series of devices to promptly notify any kind of danger to the safety personnel

## NORMAL FLOW

