# Ideation Phase
## Brainstorm & Idea Prioritization Template
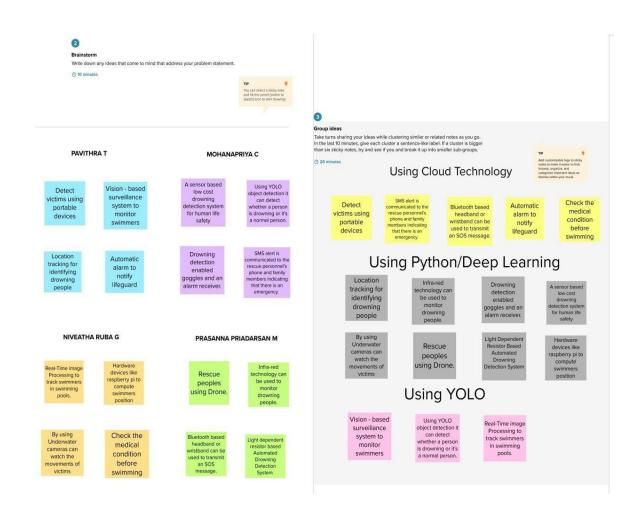
| | |
|---|---|
| Date | 28 October 2022 |
| Team ID | PNT2022TMID51610 |
| Project Name | VirtualEye - Life Guard For Swimming Pools To Detect Active Drowning |
| Maximum Marks | 4 Marks |

**Step-1: Team Gathering, Collaboration and Select the Problem Statement**
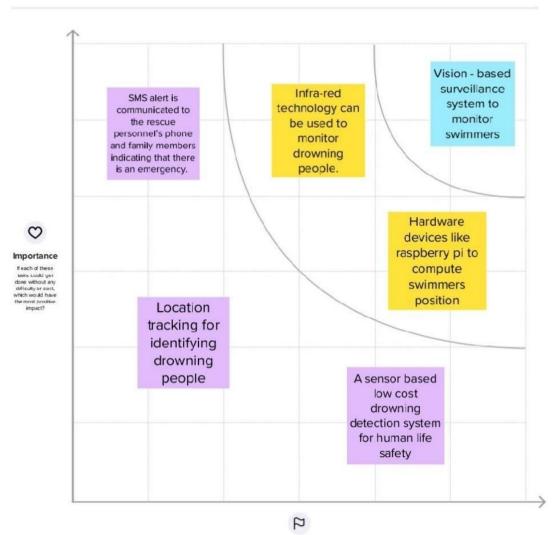
# Step-2: Brainstorm, Idea Listing and Grouping

## 2 Brainstorm

Write down any ideas that come to mind that address your problem statement.

⏱ 10 minutes

**TIP**
You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

### PAVITHRA T

- Detect victims using portable devices
- Vision - based surveillance system to monitor swimmers
- Location tracking for identifying drowning people
- Automatic alarm to notify lifeguard

### MOHANAPRIYA C

- A sensor based low cost drowning detection system for human life safety
- Using YOLO object detection it can detect whether a person is drowning or it's a normal person.
- Drowning detection enabled goggles and an alarm receiver.
- SMS alert is communicated to the rescue personnel's phone and family members indicating that there is an emergency.

### NIVEATHA RUBA G

- Real-Time image Processing to track swimmers in swimming pools.
- Hardware devices like raspberry pi to compute swimmers position
- By using Underwater cameras can watch the movements of victims
- Check the medical condition before swimming

### PRASANNA PRIADARSAN M

- Rescue peoples using Drone.
- Infra-red technology can be used to monitor drowning people.
- Bluetooth based headband or wristband can be used to transmit an SOS message.
- Light dependent resistor based Automated Drowning Detection System

## 3 Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go.
In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

⏱ 20 minutes

**TIP**
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

### Using Cloud Technology

- Detect victims using portable devices
- SMS alert is communicated to the rescue personnel's phone and family members indicating that there is an emergency.
- Bluetooth based headband or wristband can be used to transmit an SOS message.
- Automatic alarm to notify lifeguard
- Check the medical condition before swimming

### Using Python/Deep Learning

- Location tracking for identifying drowning people
- Infra-red technology can be used to monitor drowning people.
- Drowning detection enabled goggles and an alarm receiver.
- A sensor based low cost drowning detection system for human life safety
- By using Underwater cameras can watch the movements of victims
- Rescue peoples using Drone.
- Light Dependent Resistor Based Automated Drowning Detection System
- Hardware devices like raspberry pi to compute swimmers position

### Using YOLO

- Vision - based surveillance system to monitor swimmers
- Using YOLO object detection it can detect whether a person is drowning or it's a normal person.
- Real-Time image Processing to track swimmers in swimming pools.

**Step-3: Idea Prioritization**

**4**

**Prioritize**

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⏱ 20 minutes

**Importance**

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

SMS alert is communicated to the rescue personnel's phone and family members indicating that there is an emergency.

Infra-red technology can be used to monitor drowning people.

Vision - based surveillance system to monitor swimmers

Hardware devices like raspberry pi to compute swimmers position

Location tracking for identifying drowning people

A sensor based low cost drowning detection system for human life safety

**Feasibility**

Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc)