

# Ideation Phase

## Define the Problem Statement

|               |   |
|---------------|---|
|               |   |
| Team ID       | <b>PNT2022TMID43572</b>   |
| Project Name  | <b>VirtualEye - Life Guard for Swimming Pools to Detect Active Drowning</b> |
| Maximum Marks | <b>2 Marks</b>  |
| Team Members  | <b>Barshad Basha, Shamal.M, Jishin.M, Abhinandh.K</b>                       |

**S tep-1: Team Gathering, Collaboration and Select the Problem Statement**



In this session we aim to achieve a good base for beginning our project. With clear understanding of the task in hand, the next step would be to collectively put in our thoughts/ imagination and end with a proper feasibility study.

- Be Creative
- Rule out every possible ideas and improvements
- Make your points clear and purposeful
- Don't hesitate. (Every point is noteworthy)

Share the top 5 brainstorm questions that you created and let the group determine where to begin by selecting one question to move forward with based on what seems to be the most promising for idea generation in the areas you are trying to impact.


10 minutes

Have each participant begin in the "solo brainstorm space" by silently brainstorming ideas and placing them into the template. This "silent avoids group-think and creates an inclusive environment for introverts and extroverts alike. Set a time limit. Encourage people to go for quantity.

10 minutes

|  |                                     |   |
|--|-------------------------------------|---|
| High level testing must be carried out before real must be found for algorithms to world the model be followed deployment. | Proper hyperparameters              | Systematic and Efficient  |
| Requires HD  | Underwater cameras for good quality | 24/7 Power cameras a possible solution supply is must for the frames to be to detect humans system to run under deep water processed & report |
| Provide critical message to the  | Make sure the know, how the         | stakeholders and proper rescue team understand that system works. for a false alarm as  |
|  |                                     | Make sure the well  |

|                              |                         |                                 |  |  |                |                     |              |
|------------------------------|-------------------------|---------------------------------|--|--|----------------|---------------------|--------------|
| The AI should improve better | There should be results | More cameras be trained failure | be manual alert accuracy.                    | should be with more                                | system in case | used to samples for | of detection |
| How will be level in the     | system Will pool is     | detectthe should report         | detectSystem multiple should system? clumsy? | the accuracy properly if the drowning and the same |                |                     |              |

For privacy The system cameras can be purpose the mounted on the shouldnt  
video stream annoy floatingbottom boards of should not for large

[illegible]

power backup cameras connectivity should be maintained there in case of powercut, for faster alert properly for trasmission. good results

What happens if people there powerful to animals were get trained encountered camerazo eliminate are sneehanded from various in the pool? datasets, problems.

A  
I

Have everyone move their ideas into the "group template and have the team silently read through group them by thematic topics or similarities.

that arise. Encourage "Yes, and and build on the the way.

 15 minutes

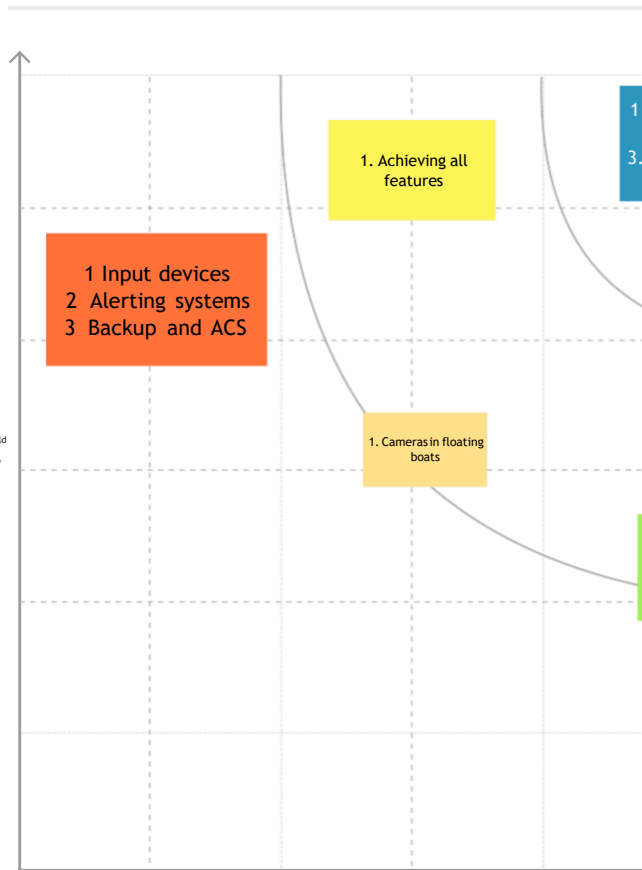
sharing space" within the  
them. As a team, sort and  
tuss and answer any questions ideas of other  
people along

**TIP** You can use the Voting session tool above to focus on the strongest ideas.

forward. Place w  
are feasible.

 20 minute

I all be on the same page  
bout what's important  
oving your ideas on this  
rid to determine which  
ideas are important and



## Feasibility

Regardless of their importance,

Give each person two icons to vote which idea should your team focus on & assign the duties & responsibilities

🕒 5 minute

**Alwin Miller C**  
Backend and  
Intergration

**Milan Moha**  
Backend and M

Ansil Shamsudheen  
Frontend and  
Design

## Musesh and Utils

## Whats Next...

1. Plan and code an efficient model and train it with the correct hyperparameters to produce a probable and accurate result.
2. Enhance the system to work in a proper environment in an integrated manner to yield a cohesive solution.
3. Create a proper frontend dash to give critical information with utmost clarity and least delay.
4. Comeup with the solution that is minimal, portable less intrusive and cost effective.



- Arguments are good ALA it lands beneficial
- Have various perspectives towards the problem

### QUESTION 3

How might we optimize the detection algorithm to yield results in the least time?

QUESTION 4

How might we bring more privacy, yet use camera for detection?

QUESTION 5

How might we optimally use minimal hardware to get the most accurate information in an around the environment?

be stored.

swimming pools.

others



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which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

