Virtual Eye

Brainstorm & idea prioritization

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.

Ground Rules

- Be Creative
- Rule out every possible ideas and improvements
- Make your points clear and purposeful
- Don't hesitate. (Every point is noteworthy)
- Arguments are good ALA it lands beneficial
- Have various perspectives towards the
- problem

1 Choose your best "How Might We" Questions

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

Question 1
How might we detect and differentiate active drowning with the least possible error rate?

Question 2
How might we automate the alert systems so as to provide crutial stats and info to the rescue team ?

Question 3
How might we optimize the detection algorithm to yield results in the least time?

Question 4
How might we optimally use minimal hardware to get the most accurate information in an around the environment?

Question 5
How might we bring more privacy, yet use camera for detection?

Brainstorm

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

DANISH L

- High level must be carried out before real world development.
- Proper hyperparameters must be found for the model.
- Systematic and efficient algorithms to be followed.
- Underwater cameras are possible to detect human under deep water.
- 24/7 power suppy is must for the system to run and report.

ASHISH SURESH

- Requeries HD cameras for the good quality.
- Provide critical and proper message to the team.
- Make sure that the stakeholders know how the system works.
- Make sure that the stakeholders understand that there is a false alarm as well.
- Using alternative source of energy such as solar to make a green system but making sure for the suppy

AFFRAN SN

- There should be manual alarm when the system failures.
- More cameras should be used to check for the accuracy.
- AI should be trained to detect the persons.
- Setup a ACS and suggestive ways to ensure the information.
- For privacy propose the video should be stored.

DHANISH ERSHAD

- Able to process absolute drowning and also altering.
- Ensure there is a 100% gaurentee or spoting a drowning situations.
- System should detect multiple drowning and report the same.
- The system should access properly if the poor clumsy.
- What happens when the animals entered the water?

3 Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

Power

- 24/7 power supply and power back should be ready.
- Using a alternative source of energy such assolar to make a green system.

Features

- Having retro refletive indicators are given to children newbies and teaching them signals.
- Having an integration with fitness band companies to get vital stats of a swimmer to have better information.

Privacy

- For privacy propose the video should be stored.
- Ensure that the video feed is being recorded or saved instead being uesd.

Cameras & Hardwares

- Camera should be maintained properly in good condition.
- Camera should be mounted under the water and bottom of floating board for detecting.
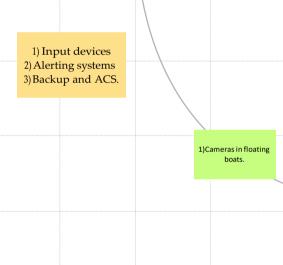
User Perspective

- Make sure the stakeholders know how the system works and understand the possibility of system work.
- The system should not annoy the swimmers.

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.

Importance

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

Feasibility

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

- 1)Achieving all features.
- 1. Model and Dataset 2. Privacy 3. Renewable Backup 4. Connectivity
- 1) Input devices 2) Alerting systems 3)Backup and ACS.
- 1)Cameras in floating boats.
- 1. User perspective 2. Guidelines