Ideation Phase Ideation

Date	9 October 2022
Team ID	PNT2022TMID51072
Project Name	Virtual Eye - Life Guard For Swimming Pools ToDetect Active Drowning
Maximum Marks	2 Marks



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

Choose your best "How Might We" Questions

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

OUESTION 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 ?

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

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?

Brainstorm solo

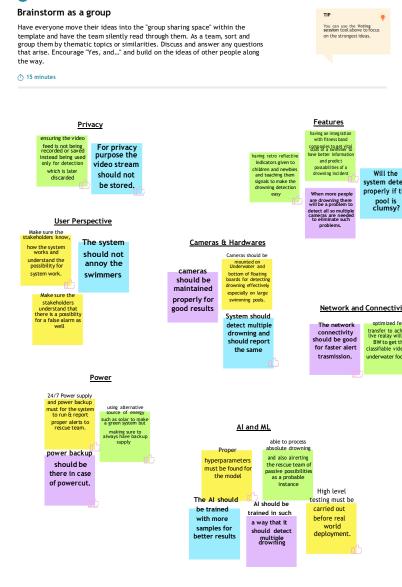
Have each participant begin in the "solo brainstorm space" by silently brainstorming ideas and placing them into the template. This "silent-storming" avoids group-think and creates an inclusive environment for introverts and extroverts alike. Set a time limit. Encourage people to go for quantity.

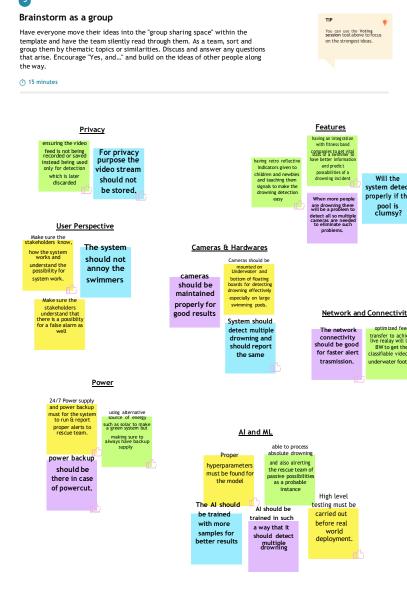
10 minutes

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

The AI should be trained with more samples for better results	There should be manual alert system in case of detection failure	More cameras should be used to improve accuracy.
How will be the accuracy	Will the system detect	System should detect multiple
	properly if the	drowning and
level in the system?	pool is clumsy?	should report the same
For privacy	The system	cameras can be
purpose the		mounted on the
video stream	shouldnt	bottom of
should not	annoy	floating boards
	others	for large
be stored.		swimming pools.

optimized feed	able to process absolute drowning	setup an ACS and suggestive ways to
transfer to achieve live realay will less	and also alrerting	ensure the
BW to get the	the rescue team of passive possibilities	information reaches in one or more ways as
classifiable video of	as a probable	this deals with critical
underwater footage	instance	life saving situation
ensuring ways where	ensuring the video	using alternative
there is a 100%	feed is not being	source of energy
gaurentee of spotting a drowning situations and	recorded or saved instead being used	such as solar to make a green system but
placing multiple cameras strategically to achive	only for detection	making sure to
results in unpredictable situations	which is later discarded	always have backup supply
1		
having an integration with fitness band	having retro reflective	having considered
companies to get vital stats of a swimmer to	indicators given to childeren and	the metrics and variance of different
have better informati	on newbies and teaching	
and predict	them signals to mak	e different swimming
	the drowning	environments both
possabilities of a	detection easy	controlled and liesure
possabilities of a drowning incident	detection easy	controlled and liesure
	The network connectivity should be good for faster alert trasmission. When works people will be a problem to detect all so multiple cape and makes peopled problems.	cameras should be maintained properly for good results Use powerful algorithm to get trained from various datasets.
power backup should be there in case of powercut. What happens if animals were encountered in the pool?	The network connectivity should be good for faster alert trasmission. Ween JANNE Problem to detect all so multiple careemainate, species	cameras should be maintained properly for good results Use powerful algorithm to get trained from various
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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.

① 20 minutes

