Ideation Phase
Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID35350
Project Name	Project - VirtualEye - Lifeguard 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!

Bhavya Ramkumar

- Automate the role of a lifeguard
- Install cameras in the pool to monitor swimming activity
- Ensure access to first aid equipment
- Ensure proper swimming training for novice swimmers before allowing them into deep parts of the pool

Vriksha Srihari

- Wear devices that aid buoyancy
- Ensure the presence of a lifeguard while swimming
- Install tool that doesn't replace a lifeguard, but instead assists them in doing their job more efficiently
- Make sure young children are always supervised

Sahana Dinesh

- Use the buddy system while swimming as a group
- Conduct training sessions for supervisors to recognise signs of distress/danger
- Follow the 20-minute rule (swimming after eating)
- Don't get into the pool unless you are physically well

Shruti Shivakumar Jayaraman

- Instead of lifeguards, employ instructors who stay in the pool and manage the swimmers
- Equip all swimmers with sensors and continuously monitor their depth
- Attach novice swimmers to a safety line that they can use to pull themselves up
- 24/7 surveillance with power backup

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.

⏱ 20 minutes

Safety Devices
- Attach novice swimmers to a safety line that they can use to pull themselves up
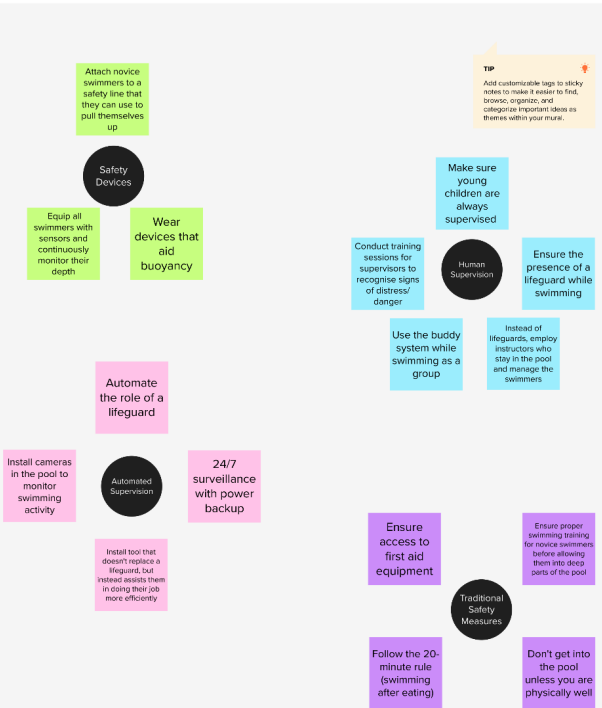- Equip all swimmers with sensors and continuously monitor their depth
- Wear devices that aid buoyancy

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

Human Supervision
- Make sure young children are always supervised
- Conduct training sessions for supervisors to recognise signs of distress/danger
- Ensure the presence of a lifeguard while swimming
- Use the buddy system while swimming as a group
- Instead of lifeguards, employ instructors who stay in the pool and manage the swimmers

Automated Supervision
- Automate the role of a lifeguard
- Install cameras in the pool to monitor swimming activity
- 24/7 surveillance with power backup
- Install tool that doesn't replace a lifeguard, but instead assists them in doing their job more efficiently

Traditional Safety Measures
- Ensure access to first aid equipment
- Ensure proper swimming training for novice swimmers before allowing them into deep parts of the pool
- Follow the 20-minute rule (swimming after eating)
- Don't get into the pool unless you are physically well

Step-3: Idea Prioritization

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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.

⏱ **20 minutes**

Importance

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

ML model requires high accuracy

Installing multiple cameras in perfect angles

Alert and monitoring system must be user-friendly

Customize the system for each pool

Prevention of ghost detection by the ML model

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

Traditional pool safety measures must be taken care of

Feasibility

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