

# Ideation Phase


## Brainstorm & Idea Prioritization Template

Date	21 SEPTEMBER 2022
Team ID	PNT2022TMID10251
Project Name	IOT Based Real-Time River Water Quality Monitoring and Control System
Maximum Marks	4 Marks

## Brainstorm & Idea Prioritization

### Step-1: Team Gathering, Collaboration and Select the Problem Statement

Template



## Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 🕒 10 minutes to prepare
- 🕒 1 hour to collaborate
- 👤 2-8 people recommended

Share template feedback

➔

**Before you collaborate**

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes

A

**Team gathering**

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B

**Set the goal**

Think about the problem you'll be focusing on solving in the brainstorming session.

C

**Learn how to use the facilitation tools**

Use the Facilitation Superpowers to run a happy and productive session.

Open article ➔

1


**Define your problem statement**

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes

PROBLEM

How might we [your problem statement]?



### Key rules of brainstorming

To run an smooth and productive session

➡️ Stay in topic.

💡 Encourage wild ideas.

⏸️ Defer judgment.

👂 Listen to others.

🗣️ Go for volume.

👁️ If possible, be visual.

## Step-2: Brainstorm, Idea Listing and Grouping

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### 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!

#### GERALD RUBAN

Monitor the quality of water.

Testing the quality from remote location.

Arduino Controller is used to generate readings

Water pollution can be investigated.

Current system is time consuming

Water is an important factor of our ecosystem.

A wireless communication system is sufficient.

pH, turbidity and temperature will be the sensors used.

Collected data can be stored in cloud platform.

#### LAKSHMANA KUMAR

Real-time database is used as cloud server.

Collected data is analyzed and results are updated.

Authorizations are responsible for giving alerts about the current quality of water.

Alerts can be provided as SMS.

Cloud Data can be retrieved anywhere anytime.

Different sensors can be used to access the water quality.

Current state of water is due to man made activities.

Monitoring water quality monitoring is very important for maintaining ecosystem and livelihood.

This system also helps in maintaining the water quality.

#### ASWATH S

Ensuring the quality of water before using it is the best.

Water quality monitoring system is cost efficient.

Determining the quality of water reveals the health consequences that may happen.

Existing water quality monitoring system is high power consuming and high cost.

This system is more accurate than the existing system.

Predictions can be done over the cloud data.

Remote monitoring of water quality is time saving.

Testing the quality from remote location.

It also helps in reducing the risk of causing many deceases.

#### BENHER CHRISTOPHER

Usage of different sensors to analyze the water quality

Testing the quality from remote location.

Machine learning algorithms are used to draw conclusions on water quality.

Existing water quality monitoring system is a manual system.

Monitoring water quality plays an important role in determining whether the water is consumable or not.

The existing system is time consuming where the proposed system is not.

Advanced and automated sensor can give detailed insight about water quality.

This system of water quality monitoring is an automated system.

Whenever the quality of water exceeds the normal level, the user will be notified accurately.

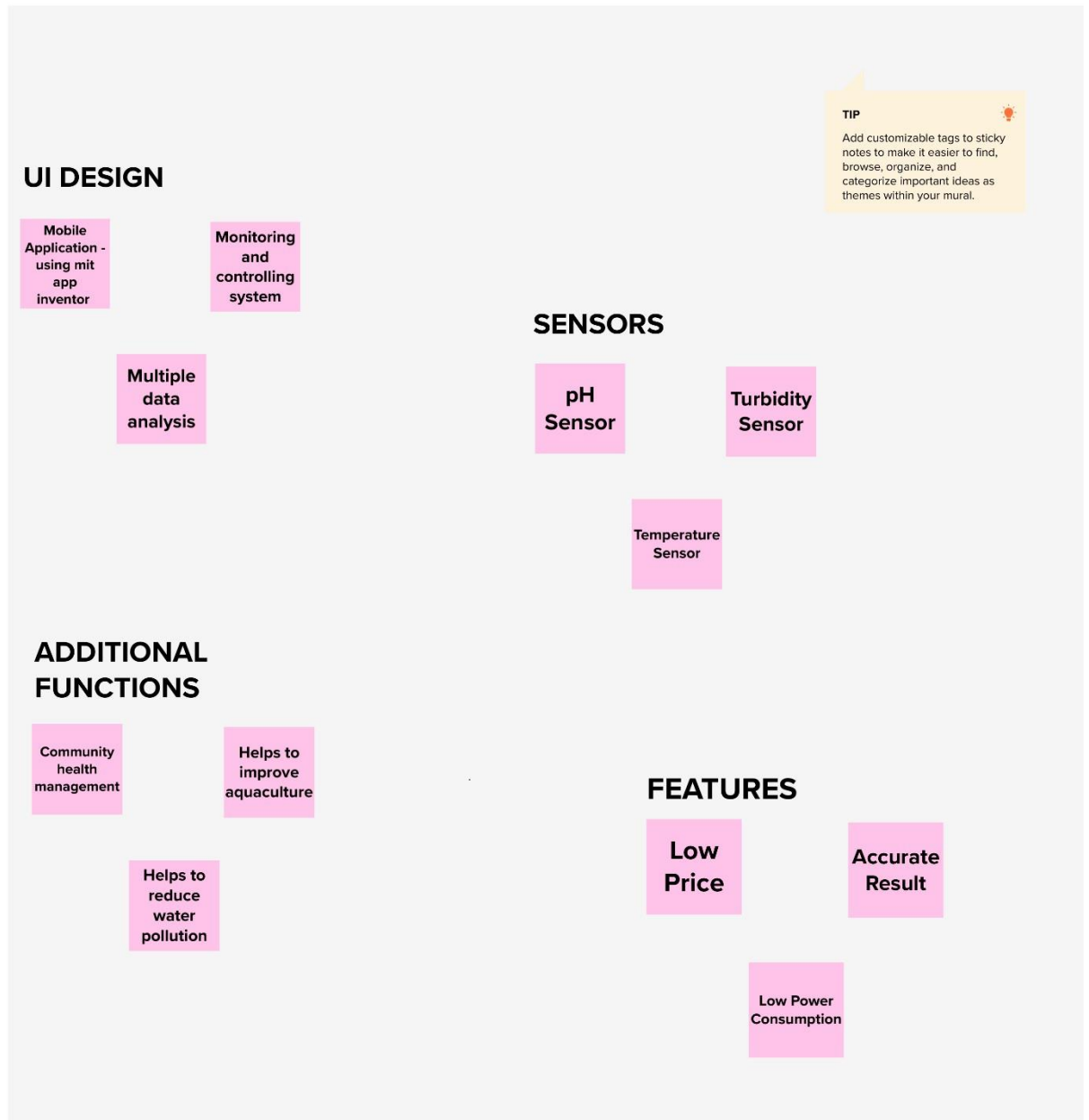
## Step-3: Idea Prioritization

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### 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



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

