

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	01 November 2022
Project Name	Real-Time River Water Monitoring and Control System
Maximum Marks	4 marks


Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem-solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich number of creative solutions. 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.

Reference: <https://www.mural.co/templates/empathy-map-canvas>

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

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➕

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 Superpower is to run a happy and productive session.

[Open article](#) →

MEMBERS OF IDEATION PROCESS

TEAM LEADER: SANDHIYA S

TEAM MEMBERS:
MONISHA B
SWEETY SHARON A
VINISHA R

DISCUSSION TOPIC:

Ideas for monitoring and solving the contaminated river water near agriculture fields

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]?

PROBLEM STATEMENT

Farmers put fertilizers and pesticides on their crops so that they grow better but these can be washed through the soil by rain to end up in the rivers

If a large number of fertilizers or farm waste drain into the river, the concentration of nitrate and phosphate in the water increases considerably algae uses these substances to grow and multiply rapidly turning the water green

The massive growth of algae called Eutrophication that leads to pollution. When the algae die they broken down by the action of bacteria which quickly multiply using up all the oxygen in the water which leads to the death of many animal

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

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

🕒 10 minutes

Sandhya S

Arduino and sensor based water parameters monitoring

PH turbidity, temperature sensors connected with arduino

GSM modules to collect and transfer water quality data to mobile applications

Ultrasonic radiation for algae control

Monisha B

Identifying of threshold values of PH temperature and turbidity

Algorithm, encryption and decryption data of PH and turbidity of water

UI Web application for water monitoring

Alerting water contamination of algae to locals through Wi-fi

Sweety Sharon A

App developing for detecting PH turbidity and temperature of river water

Predicting the algae bloom graph

Using graph, creating databases in cloud

Ion exchange method after detection

Vinisha R

Lab based water parameter datas

Predicting the growth of algae using contaminated method

Motor like device and chlorine can be used to clear algae

Manual checking of water contamination by paper report

Step-3: Idea Prioritization

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

