

Ideation Phase

Brainstorm & Idea Prioritization

Date	19 September 2022
Team ID	PNT2022TMID21489
Project Name	Essential Water Quality Analysis and Prediction using Machine learning
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 are not sitting in the same room.

Brainstorming steps

- **Step-1: Team Gathering, Collaboration and Select the Problem Statement**
- **Step-2: Brainstorm, Idea Listing and Grouping**
- **Step-3: Idea Prioritization**

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

Template



Brainstorm & idea prioritization

We as a team has involved in a brainstorming session to come with problem statements and its solution to solve.

10 minutes to complete
1 hour collaboration
3 people participated

Show template feedback

Before collaboration

A little bit of preparation has been done for 10 minutes. Here's what we have prepared in the preparation time.

10 minutes

Team gathering

- Defined who should participate in the session
- The open meeting sent an invite through email
- The team members have joined the Google meet
- The host for collaboration is sent by email

Set the goal

- A proper explanation on what, why, and how we will do brainstorming was given up the team lead
- Considered the problem we plan to concentrate on solving throughout the brainstorming session

Learn how to use the facilitation tools

Use the facilitation 5 guidelines to run a happy and productive session

Open article

Define your problem statement

The problem we are trying to solve is Water Quality Analysis. This will be the focus of our brainstorm.

15 minutes

PROBLEM

ESSENTIAL WATER QUALITY DETECTION AND PREDICTION USING MACHINE LEARNING

Key rules of brainstorming

To run an smooth and productive session, an are required to follow below rules

Stay on topic

Encourage wild ideas


Defer judgement


Listen to others

Go for volume

Be positive, be visual

Need for Water Quality Analysis





Need some inspiration?

Use a related article or link on water to activate your mind.

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Step-2: Brainstorm, Idea Listing and Grouping

3 Brainstorm

The ideas are listed down as sticky notes by team members.

25 minutes

Dorika Ruby H M

Water Quality analysis - Four major parameters	Developing more accurate sensor that can detect the presence of microplastic in water.	Parameter: Dissolved Oxygen
The quality of dissolved oxygen is a key indicator of water quality in streams and lakes.	The DO test measures the amount of oxygen dissolved in the water.	Microplastic has a higher concentration of dissolved oxygen in plasticized material than the water quality is high.
Water quality can be improved by using a sensor that can detect the presence of microplastic in water.	We should develop a web application to detect and predict water quality.	Accuracy plays a prominent role in the quality analysis.

Edwarde ABR

Water quality analysis is a key indicator of water quality in streams and lakes.	Parameter: pH	Microplastic has a higher concentration of dissolved oxygen in plasticized material than the water quality is high.
A pH test measures the acidity or alkalinity of water.	A pH of 7 is neutral, below 7 is acidic and above 7 is basic or alkaline.	Microplastic has a higher concentration of dissolved oxygen in plasticized material than the water quality is high.
A pH test measures the acidity or alkalinity of water.	We classify whether the water is fit or unfit for usage.	We can apply classification algorithms like KNN, SVM.

Sushritha M

Water quality is one of the most important health indicators in a community.	Parameter: Conductivity	Conductivity is a good indicator of the amount of dissolved salts in water.
Conductivity is a good indicator of the amount of dissolved salts in water.	Conductivity is a good indicator of the amount of dissolved salts in water.	Conductivity is a good indicator of the amount of dissolved salts in water.
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Valluram VR

Water quality is one of the most important health indicators in a community.	Parameter: BOD	BOD is a good indicator of the amount of organic matter in water.
BOD is a good indicator of the amount of organic matter in water.	BOD is a good indicator of the amount of organic matter in water.	BOD is a good indicator of the amount of organic matter in water.
BOD is a good indicator of the amount of organic matter in water.	BOD is a good indicator of the amount of organic matter in water.	BOD is a good indicator of the amount of organic matter in water.

3 Group ideas

Clustered group of ideas based on similarity.

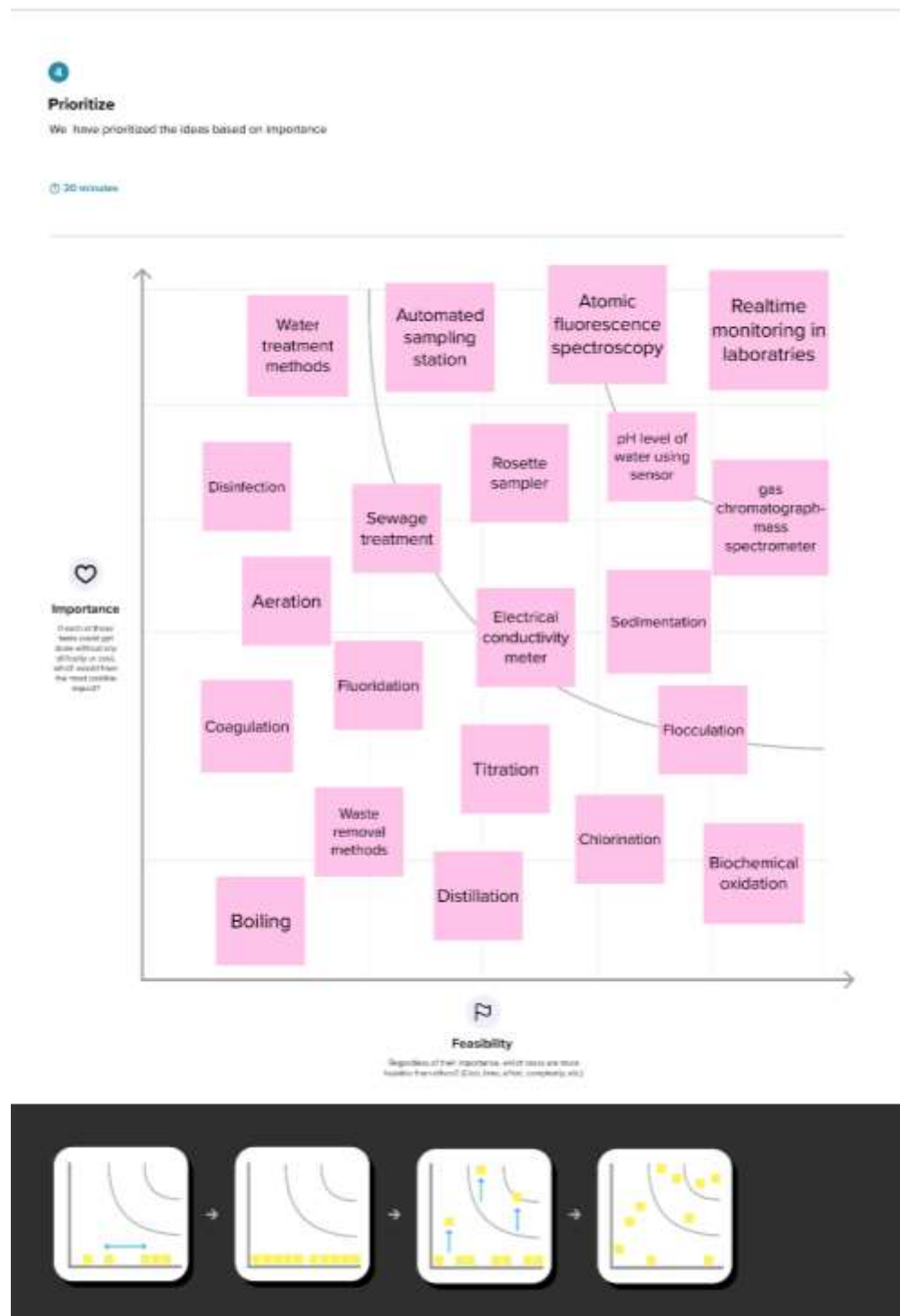
20 minutes

KEY INDICATORS

SOLUTION

STANDARD LEVELS

Step-3: Idea Prioritization



OVERALL BRAINSTORMING AND IDEA PRIORITIZATION

