Ideation Phase
Brainstorm & Idea Prioritization Template

Team ID	PNT2022TMID13087
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

Step-2: Brainstorm, Idea Listing and Grouping

② Brainstorm

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

🕐 10 minutes

Smitha Rajini T

Testing the quality of water from a remote location	Pollution of water can be investigated by a stringent mechanism
Monitoring water quality is very important for maintaining ecosystem health and the livelihood of the population	Arduino controller is used to generate the reading
the collected dat is analyzed and results are updated	different sensor can be used to access the water quality

Siva Sangeetha R

A wireless communication system is efficient	usage of different sensor to analyze the water quality
real-time database used for cloud server	SMS alert can be made incase of high values
cloud data can be retrieved anywhere and predictions can be done	current water quality monitoring system is cost and time consuming process

Gobika R M

Monitoring water quality is an important part of helping us determine whether or not we are making progress in cleaning up our waterways.	Current water quality monitoring system is a manual system with a monotonous process and is very timeconsuming
advanced and automated sensor can give detailed insight about water quality	machine learning algorithms are used to draw conclusions on quality
The state of the water is the result of man made activities	alarm can be triggered if the value goes beyond the limit

Sheron S

Ensuring the safety of river water before consuming is best	Determining the quality of the water reveals the health consequences that may happen
Water quality monitoring is a cost-effective and	sensors used maybe pH, temperature, salinity, turbidity, pressure, etc
Remote monitoring of water quality is time saving	The collected data can be stored in cloud platform

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 and break it up into smaller sub-groups.

🕐 **20 minutes**

Monitoring water quality is an important part of helping us determine whether or not we are making progress in cleaning up our waterways.

quality of water analzed help in predicting and conveying the usage of the water like if contaminated not used for drinking can be used for specific crop

sensors used maybe pH, temperature, salinity, turbidity, pressure, etc
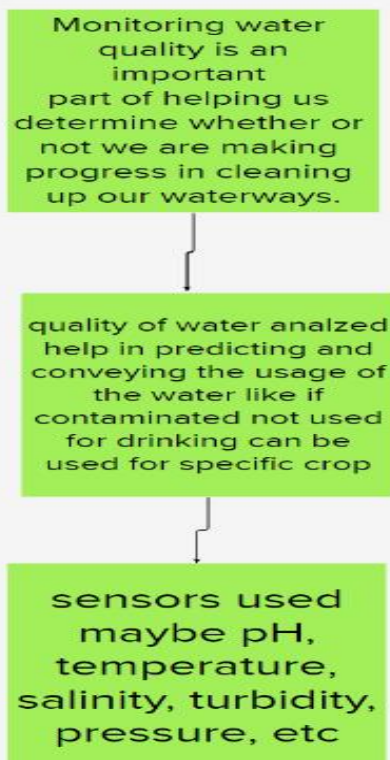
4

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

Importance

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

- Current water quality monitoring system is a manual system with a monotonous process and is very timeconsuming
- alarm can be triggered if the value goes beyond the limit
- pH sensor
- Cloud
- salinity sensor
- Arduino
- temperature sensor
- turbidity sensor
- Testing the quality of water from a remote location
- Monitoring water quality is very important for maintaining ecosystem health and the livelihood of the population
- Remote monitoring of water quality is time saving
- cloud data can be retrieved anywhere and predictions can be done
- Arduino controller is used to generate the reading
- The collected data can be stored in cloud platform
- usage of different sensor to analyze the water quality
- The state of the water is the result of man made activities
- Pollution of water can be investigated by a stringent mechanism
- machine learning algorithms are used to draw conclusions on quality
- Water quality monitoring is a cost-effective and
- current water quality monitoring system is cost and time consuming process
- different sensor can be used to access the water quality
- sensors used maybe pH, temperature, salinity, turbidity, pressure, etc
- Determining the quality of the water reveals the health consequences that may happen
- real-time database used for cloud server
- advanced and automated sensor can give detailed insight about water quality
- A wireless communication system is efficient
- SMS alert can be made incase of high values
- Ensuring the safety of river water before consuming is best
- Monitoring water quality is an important part of helping us determine whether or not we are making progress in cleaning up our waterways

Feasibility

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