

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	16 October 2022
Team ID	PNT2022TMID33916
Project Name	IoT based Real time river water quality Monitoring and Control System
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization:

1 Problem Statement

A heavy load of untreated sewage and industrial effluents are emptied into the rivers. This affects not only the quality of water but also the self-cleaning capacity of the river.

TOPIC

Real-Time River Water Quality Monitoring and Control System

Our aim is to monitor the Quality of River water and take necessary steps to prevent the agents which degrade the quality. The Problem can be solved by reducing the pH value by using Smart Sensor

2 Brainstorm

Write down any ideas that come to mind. The better, your problem statement.

HARI PRASATH A S

- To develop the app for detecting pH, turbidity and temperature of the river water.
- Motor like device for clearing algae and contains chlorine for cleaning water.
- GSM Module to collect and transfer water quality data to mobile applications.
- Dissolve air flotation methodology for controlling algae.
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- Biological and chemical changes identification of water by conventional method.

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- Biotreatment is needed for treating the contaminated water.
- Alerting water contamination of algae to locals through wifi connection.
- Dissolve air flotation methodology for controlling algae.
- Using graph creation is mandatory for systematic analysis.
- UI web application for monitoring the water condition.
- Using Turbidity sensor for turbidity measurement.
- Collecting fertilizer and pesticide contaminated water through field site ridges.
- Creating database technology to store the data of the measures results and values.
- Creating miniature dam to collect the solid waste and harmful algal blooms.

3 Group Ideas

Take 10 minutes. Your ideas will be shared with the group. One of the ideas will be chosen to develop the solution. It is a chance to share your ideas with the group and get feedback.

AWAWARENESS

Proper disposal of Garbage. Filtering harmful chemicals from the river water.

IoT

Set the IBM Watson IoT Platform and Create the API keys that are used in the NOOGE RED service.

KNOWLEDGE

Training and proper education.

CARE

Don't throw any solid waste into the water streams as it clogs the flow of water thereby leading to pollution.

PROCESS

Control the industrial Waste in the river and also the biological condition of the river.

SENSOR

TOC Sensor: Total Organic Carbon (TOC) is an important parameter for water quality analysis. It is used as a direct indicator and a surrogate for many water quality parameters.

UPON MONITORING

Upon monitoring keeps an eye out on the other factor

4 Prioritize

Your team should all be on the same page about which approach is most likely to succeed. Then, your ideas on the go to the next step which is to develop the solution.

Using Turbidity sensor for turbidity measurement.

Set the IBM Watson IoT Platform and Create the API keys that are used in the NOOGE RED service.

Creating database technology to store the data of the measures results and values.

Biological and chemical changes identification of water by conventional method.

Proper disposal of Garbage. Filtering harmful chemicals from the river water.

TO DEVELOP THE APP

To develop the app for detecting pH, turbidity and temperature of the river water.

CONTROL THE INDUSTRIAL WASTE

Control the industrial Waste in the river and also the biological condition of the river.

CREATING DATABASE

Creating database technology to store the data of the measures results and values.