## Real Time River Water Quality Monitoring And Control System

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# Customer experience journey map

Use this framework to better understand customer needs, motivations, and obstacles by illustrating a key scenario or process from start to finish. When possible, use this map to document and summarize interviews and observations with real people rather than relying on your hunches or assumptions.

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### **PREREOUISTE**

How does someone initially become aware of this process?

> Our goal can be achieved by analyzing and computing of real time data to implement the measures to be taken to purify the River water. For this IOT and WSN

play a vital role to group things.

To access the data collected by the system we just need to use internet of things and time continuous monitoring unit. This can be provided by the WSN which relates the the remote sensing technology handled for data collection. We can have a visual format on desktop using IBM cloud streaming analysis through machine-learning in Python ,Convolutional neural networks is used in comparison of values.

SINCE WATER CONSISTS OF MORE THAN SEVERAL ISSUES ,TO MEET WITH THE CONSTRAINTS MORE NUMBER OF SENSORS ANALYSING AND COMPUTING RESULTS BASED ON CONDITION OF WATER IS DEMANDED BY THE CUSTOMER

Water qualities analyzed through the pH and temperature sensors are computed and are stored in DBMS for the turbidity, pH, temperature factors of river water to be controlled using IOT device.

On one hand customer had disbelieve in the product. Also thought may malfunction due to placement of the system deep in the water.

These types are products highly required in fields of a portable and real time water quality monitoring system. Also in prototype remote and automatic system in low cast manufacture.

#### **PROJECT FLOW**

What do people begin the process

> For an small water containment or storage people can handle different methods. But for a large wate reservoirs such as lake river and so on it is a water resource used by many and is a huge amount fo that this kind of system is imminent. Even though there are other methods a dynamic and efficien quality control cannot be guaranteed. The speciality of this system is we use todays trending tech solutions as of IOT and real time remote sensing makes it efficient for water quality monitoring and control.

So the product is basically a smart technology for river quality monitoring such a way designed to analyze the pH, temperature and turbidityof water

the core point is to create a time continuous system that can monitor the quality of water using WSN and ZIGBEE for allow power cost efficientsystem.

the interfacing of multiple sensor nodes using WSN architecture is critically implemented in the controller using IOT platform. Whichitself make an dynamic powerful system to use.

The disadvantage is maintenance such as dysfunctional battery power source needs to be periodically replaced.

is monitoring .this has to be imminent as from the values inferred that water can support system is functional.

#### **WORKING**

In the core moments in the process, what

A bot interaction system created between IBM cloud and IOT platform is constructed to created an data organization, this is inculcated in an android app which is developed for the customers to view the sensor inferences via mobile .A effective message system developed that provide notifications and warnings

**BENIFITS** 

What do people

typically experience

as the process finishes?

The hazardous nature of

water containing

unconditional physical and

chemical aspects are taken

care of and assures perfectly

purified river water resource.

the knowledge through DBMS

gives people consciousness of

contaminated water and to stop

pollution of it further more, also

involves them in teachings.

Low cost is the first priority from

all users that is satisfied and yet

another constraint making our

customers happy is that it is a

high performance gain system

inlow cost.

IOT makes integration of all the

components as analytical

interfacing block ,DBMS and IOT

device for innovation . in turn

givingpeople to learn

acknowledge and develop the

product system.

Since a complex battery for low

power unit is used the methods are

not abundant and also the

resources for maintenance. Hence

maintenance may cost some

people money.

If the safety level of water exceeds base scale an fast SMS is sent by the agent as an alert.

there are two options of storage in this system we can either use cloud storage or external memory that can be locally used to gain sensed parameters.

The different sensor nodes each connected via WSN are dynamically involving in river water physical and chemical parameter analysis and collection of values which is efficient and quick

Animal water crossing, accidental human interpretations and calamities can affect the mounted WSN to be

to have a reliable system for changes in the system. drinking polluted water.

#### **OUTCOME**

What happens after the experience is over?

HIGH FREOUENCY AND MOBILITY GAURENTEED BY THIS SYSTEM CAN IMPROVE THE WATER OUALITY WHICH CAN BE USED FOR DRINKING PURPOSE.AUTHORITIES LINKED TO THIS PRODUCT CAN TAKE MEASURES IF CONTACTED.

An efficient water management system can be developed as said before there are innovative chances given with the platform in the system design.

Manual practices consumes time and energy and are unreliable due to change in readings occasionally which is solved by thissystem. providing energy and timesaving and high accuracy.

As per design we used a low power consuming high end power source that can create long durability and extra life, Which creates flexible system at low cost.

other sensors too can be included.

Now with this system everyone can demand a fresh river water resource instead of

large variety of applications and innovative ideas can be derived from this technology

#### Disadvantages

Advantages

Steps

Survey Details

each step along the way

Polluted percentage

need for the project

Goals & motivations

At each step, what is a person's

primary goal or motivation?

("Help me..." or "Help me avoid...")

What steps does a typical person

motivating, delightful, or exciting?

find enjoyable, productive, fun,

Existing systems

What interactions do they have at

Browsing, booking,

attending, and rating a local city tour

What does the person (or group)

What steps does a typical person find frustrating, confusing, angering costly, or time-consuming?

Required Areas How might we make each step better? What ideas do we have What have others suggested?

The water quality is to be maintained.so the important factor living standards and see whether

damaged

24/7 customer is open to the sensing parameter and data streams which enables them providing instantaneous alert