Smart Water Management

IOT Sensors:

1. Sensors: Place special devices at water sources like taps and showers to keep an eye on how much water is being used. These devices will send this data to our system.

2. Central Computer: We need a powerful computer that will gather and manage all the water data coming from these sensors. This computer is like the brain of our system.

3. User Accounts: People who want to monitor their water use can create accounts on our system. It's like having your own space on the internet.

4. Website or App: We'll make a website or a mobile app where users can log in and see how much water they're using. Think of it as a water usage dashboard.

5. Pretty Charts: We'll use charts and graphs to show this water data in a way that's easy to understand. It's like looking at a graph in a school textbook.

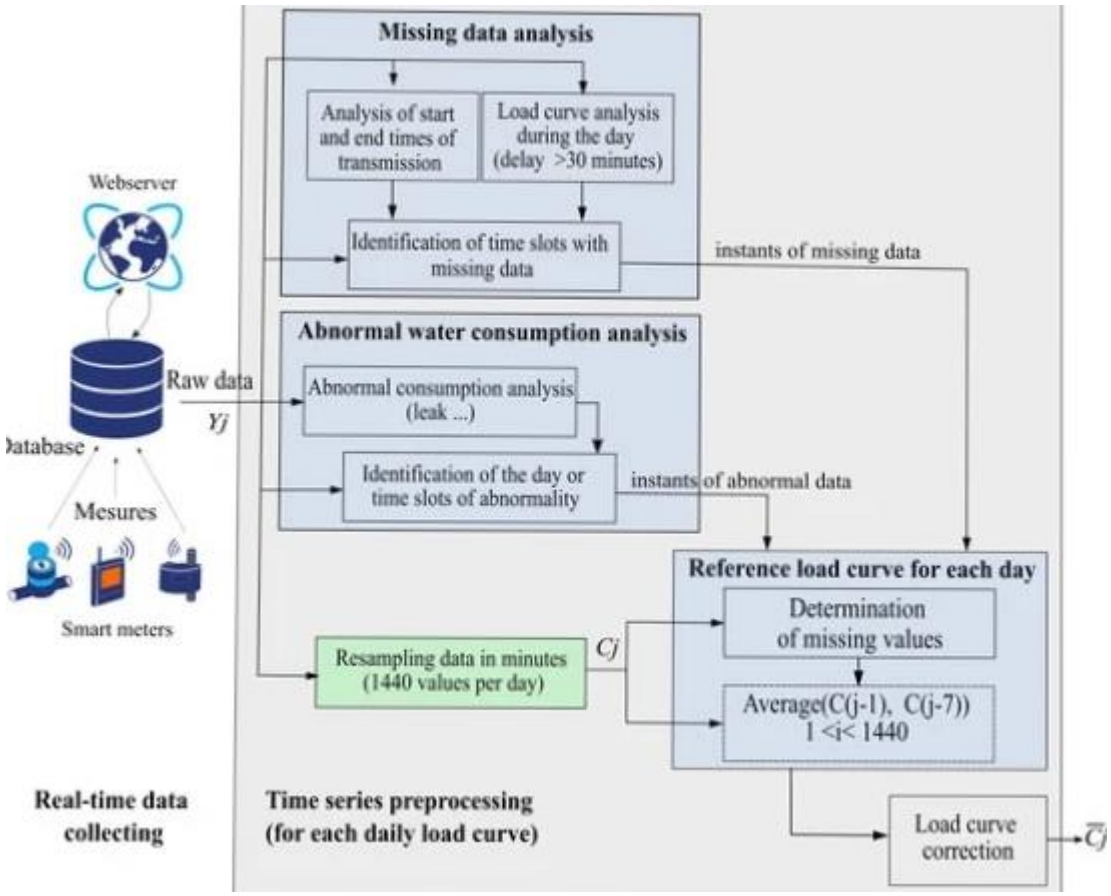
6. Warnings: If someone is using too much water, our system will send them a message to let them know. It's like a friendly reminder to save water.

7. Tips and Games: We'll also give people tips on how to save water, and we might make it a bit fun, like a game, to encourage them to use less water.

8. Mobile App: You can use a special app on your phone to see how much water you're using even when you're not at home.

9. Support and Feedback: If you have questions or need help, you can talk to our customer support team. We also want to hear your ideas to make our system better.

10. Security and Privacy: Your water usage data is safe and private. We'll make sure no one else can see it unless you want them to.



PROGRAM:

```html
<!DOCTYPE html>
<html>
<head>
    <title>Real-Time Water Consumption</title>
</head>
<body>
    <h1>Water Consumption Data</h1>
    <p id="waterConsumption">Loading...</p>

    <script>
        // Simulate real-time data updates
        function updateWaterConsumption() {
            const consumption = Math.floor(Math.random() * 100); // Replace with actual data retrieval
            document.getElementById('waterConsumption').textContent = `Current Water Consumption: ${consumption} liters`;
        }
```

```
        // Update data every 5 seconds (adjust as needed)
        setInterval(updateWaterConsumption, 5000);

        // Initial data update
        updateWaterConsumption();
    </script>
</body>
</html>
```

This example creates a simple HTML page with a JavaScript script that periodically updates water consumption data every 5 seconds (you can adjust this interval). The data is simulated using random numbers. In a real application, you'd replace the data retrieval logic with actual data from sensors, APIs, or databases.

Remember, for a more robust and secure solution, you'd likely need a backend server to retrieve real-time data and provide it to the HTML/JavaScript front end via AJAX requests or WebSockets.

OUTPUT :


IDE
1 <!DOCTYPE html>
2 <html>
3
4 <head>
5 <title>Real-Time Water Consumption</ti
6 </head>
7
8 <body>
9 <h1>Water Consumption Data</h1>
10 <p id="waterConsumption">Loading...</p
11
12 <script>
13 // Simulate real-time data updates
14 function updateWaterConsumption()
15 const consumption = Math.floor
16 document.getElementById('water
17 }
18
19 // Update data every 5 seconds (ac
20 setInterval(updateWaterConsumptior
21
22 // Initial data update
23 updateWaterConsumption();
24 </script>
25 </body>
26
27 </html>
Water Consumption Data
Current Water Consumption: 77 liters
Format
Run
Run + Generate URL