SMART WATER
MANAGEMENT SYSTEM

NAME: karthick

ID: au962921104501

EMAIL: karthickmicky47@gmail.com

PHASE: 4

INTRODUCTION

Smart water management systems can provide a more resilient and efficient water supply system, reducing costs and improving sustainability. High-technology solutions for the water sector include
digital meters and sensors, supervisory control and data acquisition (SCADA) systems, and geographicinformation systems (GIS).

SMART WATER MANAGEMENT

This explainer is adapted from proceedings of a workshop conducted by the Asian Development Bank (ADB) in Tashkent, Uzbekistan for the water sector. The workshop introduced smart systems and focusedon remote monitoring of water networks using smart meters and other instruments.

The IOT has the ability to lessen this worrying picture. Smart Water Monitoring and Management Systems, based on the combination of sensors, big data and AI technologies, can provide to water utilityoperators, farmers and companies the ability to measure, monitor and control their water distribution networks as well as the quality of the water distributed. Less waste, less consumption, and a better management of the water's quality can improve dramatically the preservation of our planet's resources.

Let's take a look at how Smart water Management systems can help addressing the growing lack ofavailable fresh water…

What are Smart Water Management systems and how do they work?

Smart Water Management is the activity of planning, developing, distributing and managing the use of water resources using an array of IOT technologies which are designed to increasetransparency, and make more reasonable and sustainable usage of these water resources.

PLATFORM U1 CODE FOR SMART FOUNDATION

```
<!DOCTYPE html>
```

<html>

<head>

<title>Smart Water Foundation</title>

<style>

/* Style for the water level display */

#

w

a

t

e

r

-

l

e

v

e

l

{

F

o

n

t

-

s

i

z

e

:

2

4

p

x

;

F

o

n

t

-

w

e

i

g

h

t

:

b

o

l

d

;

}

```
/* Style for

the submit

button */

#submit-

button {

P
a
d
di
n
g:
1
0
p
x
2
0
p
x;

F
o
nt
-
si
ze
:
1
8
p
x;

}

</style>

</head>

<body>

<h1>Smart Water Foundation</h1>

<p>Water Level: <span id=”water-level”>Loading...</span> cm</p>

<button id=”submit-button”

onclick=”sendDataToServer()”>SubmitData</button>
```

```
<script>
// Function to update water level data from
the serverFunction updateWaterLevel() {
// You can use AJAX or fetch to get data from your server
// Replace the URL with the actual endpoint that
provides water levelData
Fetch('/getWaterLevelData')

.then(response => response.json())
.then(data => {
Document.getElementById('water-level').textContent =

Data.waterLevel + " cm";

})
.catch(error => {
Console.error('Error fetching water level data:', error);
});
}
// Function to send data to the server (e.g., to trigger
data collection)Function sendDataToServer() {
// You can use AJAX or fetch to send data to your server
// Replace the URL with the actual endpoint that
handles dataSubmission
Fetch('/submitData', { method: 'POST' })
.then(response => {
If (response.status === 200) {
Console.log('Data submitted successfully');
```

```
} else {
Console.error('Data submission failed with status:',

Response.status);
}
})

.catch(error => {
Console.error('Error submitting data:', error);
});
}
// Update water level initially and then at regular intervals
updateWaterLevel();
setInterval(updateWaterLevel, 10000); // Update every 10 seconds
</script>
</body>
</html>
<!DOCTYPE html>
<html>
<head>
<title>Smart Water Foundation</title>
<style>
/* Style for the water level display */

#
w
a
t
```

e

r

-

l

e

v

e

l

{

f

o

n

t

-

s

i

z

e

:

2

4

p

x

;

f

o

n

t

-

w

e

i

g

h

t

:

b

o

l

d

;

}

/* Style for

the submit

button */

#submit-

button {

p

a

d

di

n

g:

1

0

px

2

0

px

;

fo

nt

-

si

ze

:

1

8

px

;

}

</style>

</head>

<body>

<h1>Smart Water Foundation</h1>

Water Level: Loading... cm

<button id="submit-button"

onclick="sendDataToServer()">Submit

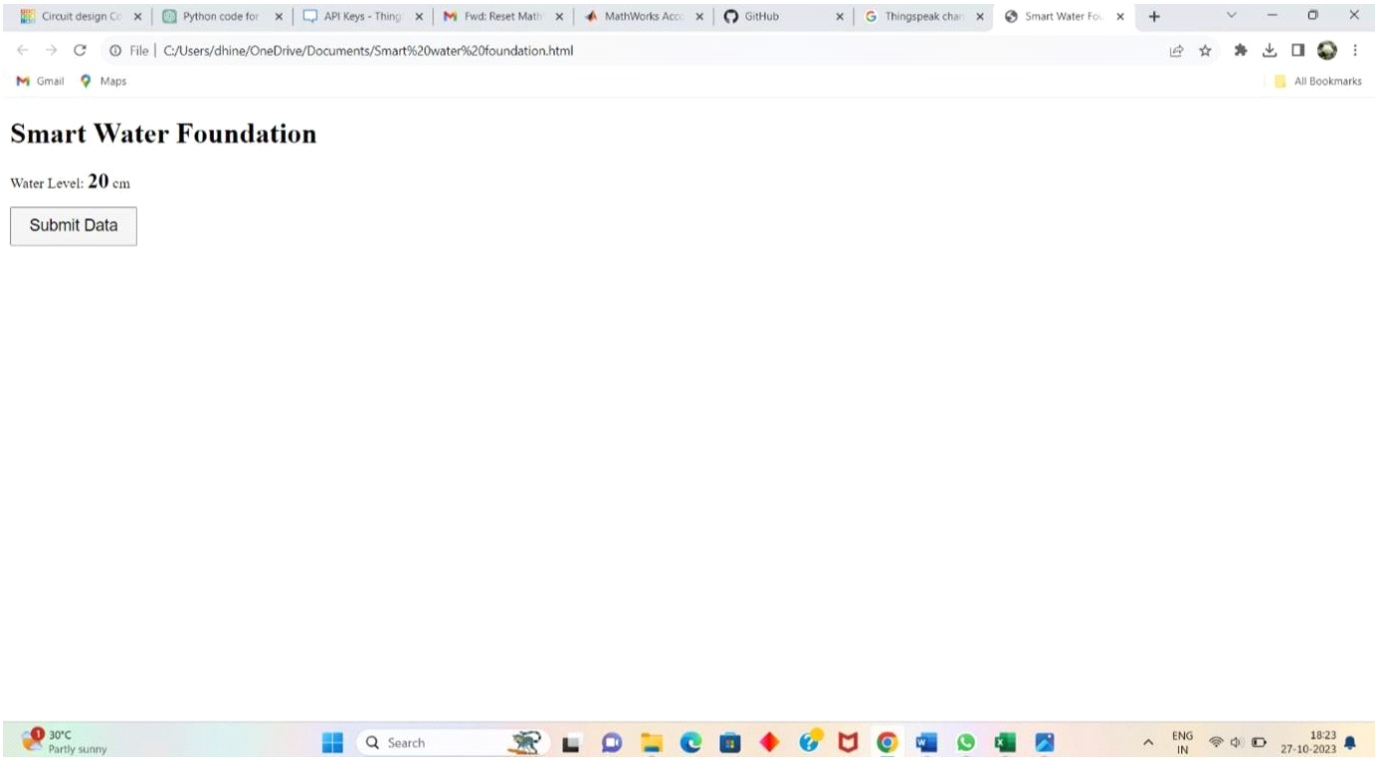
Data</button>

<script>

```
// Function to update water level data from
the serverfunction updateWaterLevel() {
// You can use AJAX or fetch to get data from your server
// Replace the URL with the actual endpoint that
provides water leveldata
fetch('/getWaterLevelData')

.then(response => response.json())
.then(data => {
document.getElementById('water-level').textContent =

data.waterLevel + " cm";

})
.catch(error => {
console.error('Error fetching water level data:', error);
});
}
// Function to send data to the server (e.g., to trigger
data collection)function sendDataToServer() {
// You can use AJAX or fetch to send data to your server
// Replace the URL with the actual endpoint that
handles datasubmission
fetch('/submitData', { method: 'POST' })
.then(response => {
if (response.status === 200) {
console.log('Data submitted successfully');
} else {
```

```
console.error('Data submission failed with status:',


response.status);
}
})


.catch(error => {
console.error('Error submitting data:', error);
});
}
// Update water level initially and then at regular
intervalsupdateWaterLevel();
setInterval(updateWaterLevel, 10000); // Update every 10 seconds
</script>
</body>
</html>
```

OUTPUT


Circuit design Co
Python code for
API Keys - Thingi
Fwd: Reset Mathi
MathWorks Acco
GitHub
Thingspeak chan
Smart Water Fou
File | C:/Users/dhine/OneDrive/Documents/Smart%20water%20foundation.html
Gmail
Maps
All Bookmarks
Smart Water Foundation
Water Level: 20 cm
Submit Data
30°C
Partly sunny
Search
ENG
IN
18:23
27-10-2023