

ENVIRONMENTAL MONITORING USING IOT

PHASE 4

REAL TIME DATA DISPLAY IN WEB PAGE

AIM

To create a platform that displays real-time environmental data using web develop technologies

SOFTWARE USED

- Notepad++
- LANGUAGES USED
- HTML
- CSS
- JavaScript

BROWSER FOR DISPLAY

- Microsoft Edge

CODES

HTML CODE

```
<!DOCTYPE html>

<html>

<head>

  <title>ENVIRONMENTAL MONITORING USING IOT</title>

  <link rel="stylesheet" type="text/css" href="styles.css">

</head>

<body>

  <h1>REAL TIME ENVIRONMENTAL DATA DISPLAY</h1>

  <div id="data-display">

    <p>Loading IoT data...</p>

  </div>

  <script src="java.js"></script>

</body>

</html>
```

CSS CODE

```
body {  
    font-family: Arial, sans-serif;  
    text-align: center;  
    margin: 20px;  
}
```

```
h1 {  
    font-size: 24px;  
    margin-bottom: 20px;  
}
```

```
.data-container {  
    display: inline-block;  
    margin: 10px;  
}
```

```
.data-label {  
    font-weight: bold;  
    margin-bottom: 5px;  
}
```

```
.data-value {  
    font-size: 18px;  
}
```

JAVASCRIPT CODE

```
const channelId = '2306875';

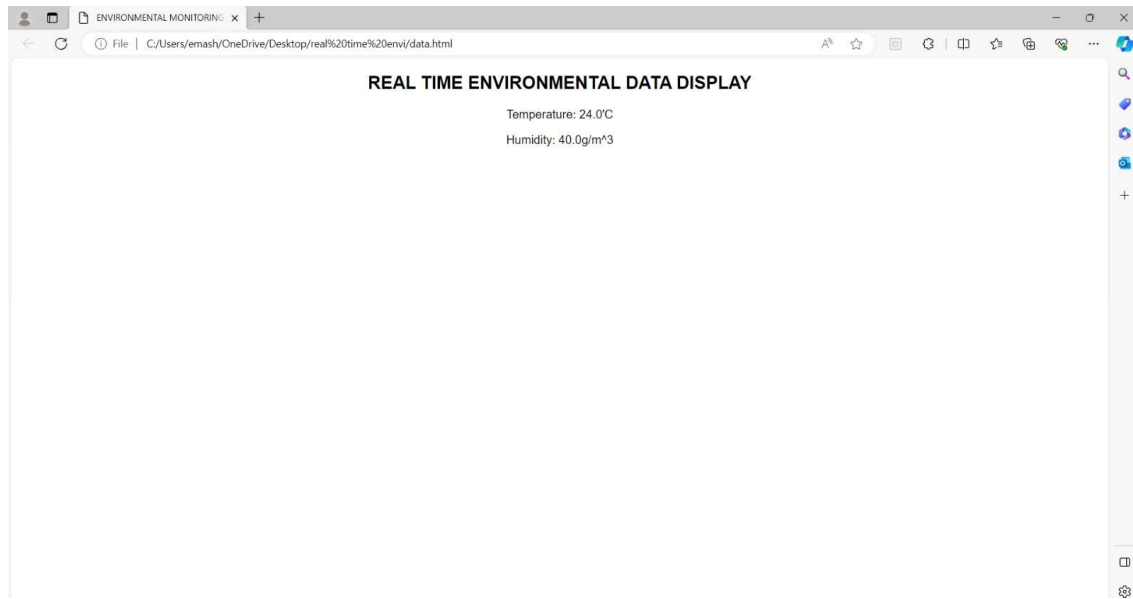
const apiUrl =
`https://api.thingspeak.com/channels/${channelId}/feeds.json?results=1`;

fetch(apiUrl)
  .then((response) => response.json())
  .then((data) => {
    if (data.feeds.length > 0) {
      const lastEntry = data.feeds[0];
      const field1Data = lastEntry.field1;
      const field2Data = lastEntry.field2;
      dataDisplay.innerHTML = `
        <p>Temperature: ${field1Data}'C</p>
        <p>Humidity: ${field2Data}g/m^3</p>
      `;
    } else {
      dataDisplay.innerHTML = '<p>No data available.</p>';
    }
  })
  .catch((error) => {
    console.error('Error fetching data from ThingSpeak:', error);
    dataDisplay.innerHTML = '<p>Error fetching ThingSpeak data.</p>';
  });
}

// Fetch ThingSpeak data initially
fetchThingSpeakData();

// Fetch ThingSpeak data periodically (e.g., every 30 seconds)
setInterval(fetchThingSpeakData, 30000); // 30,000 milliseconds = 30 seconds
```

WEB DISPLAY



THANK YOU