Lab Practice -2 [404184C] : ELECTIVE-III(C) - JavaScript

ACADEMIC YEAR: 2024-25

CLASS	: BE	DIV	: 7	Batch	: R-7	DATE	:
Roll No	42305	ABC ID	: 810-360-343-871			SEMESTER	: I

Experiment No.: 7

HTML ➜

<!DOCTYPE html>

<html lang="en"

<head>

 <meta charset="UTF-8">

 <meta name="viewport" content="width=device-width, initial-scale=1.0">

 <title>Dynamic Array Input</title>

 <link rel="stylesheet" href="style_7.css">

</head>

<body>

 <div class="container">

  <h1>Dynamic Array Input</h1>

  <div id="inputFields"></div>

  <button onclick="addInputField()">Add More</button>

  <button onclick="submitArray()">Submit Array</button>

  <div id="arrayResult"></div>

  <div class="info">

   <h2>Name: Teena Bambal</h2>

   <h3>Roll Number: 42305</h3>

  </div>

 </div>

```html
    <script src="script_7.js"></script>
  </body>
</html>
```

CSS ➔

```css
body {
  font-family: Arial, sans-serif;
  background-color: #f2f2f2;
  display: flex;
  justify-content: center;
  align-items: center;
  height: 100vh;
  margin: 0;
.container {
  background-color: white;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0px 4px 8px rgba(0, 0, 0, 0.1);
  text-align: center;
}
input {
  padding: 10px;
  margin-top: 10px;
  border: 1px solid #ccc;
  border-radius: 4px;
}
```

```css
button {
  padding: 10px 20px;
  margin-top: 10px;
  background-color: #4caf50;
  color: white;
  border: none;
  border-radius: 4px;
  cursor: pointer;
}
button:hover {
  background-color: #45a049;
}
h1 {
  color: #333;

div {
  margin-top: 20px;
  color: #333;
}
h2,
h3 {
  margin: 5px;
  color: #4caf50;
}
```

```javascript
JS ➜

let myArray = [];

// Function to dynamically add input fields

function addInputField() {

  const inputFieldsContainer = document.getElementById("inputFields");

  const newInput = document.createElement("input");

  newInput.type = "text";

  newInput.placeholder =

    "Enter an element (e.g., 5, 'hello', [1,2,3], {key: 'value'})";

  inputFieldsContainer.appendChild(newInput);

}

// Function to submit the array

function submitArray() {

  const inputs = document.querySelectorAll("#inputFields input");

  myArray = [];

  inputs.forEach((input) => {

    const value = input.value.trim();

    try {

      const evaluatedValue = eval(value);

      myArray.push(evaluatedValue);

    } catch (error) {

      alert(

        `Invalid input: "${value}". Please enter a valid JavaScript expression.`

      );

    }

  });

  displayArrayResult();

}
```

```javascript
// Function to display the result of the array

function displayArrayResult() {

  document.getElementById(

    "arrayResult"

  ).innerHTML = `Array created: [${JSON.stringify(myArray, null, 2)}]`;

  // Check if any object in the array is of type array

  const arrayObjects = myArray.filter((item) => Array.isArray(item));

  if (arrayObjects.length > 0) {

    document.getElementById(

      "arrayResult"

    ).innerHTML += `<br>The array contains the following array objects: [${JSON.stringify(

      arrayObjects,

      null,

      2

    )}]`;

  } else {

    document.getElementById("arrayResult").innerHTML +=

      "<br>The array does not contain any arrays.";

  }

}
```

Output ➤

Array Operations

Enter the array size: 5   **Create Array**

Enter an element (e.g., 5, 'hello', [1,2,3]): 'Q'   **Add Element**

View Array

Current array: [5, "hello", 0, "HELLO", "Q"]
The array does not contain any array objects.

Name: Teena Bambal
Roll Number: 42305

Date: Course Teacher Sign