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LAB CHALLENGE 6

C5: QUESTION BANK

- 1. Create a simple HTML form with an input field (id: username) and a button (id: checkButton). Write a JavaScript function that:**
 - a. Gets the value entered in the username input field.**
 - b. Displays an alert saying “Welcome, <username>!” when the button is clicked.**
 - c. If the field is empty, display an alert saying “Please enter your username.”**

```
HTML
<!DOCTYPE html>
<head>
  <title>Username Form</title>
</head>
<body>
  <label for="username">Username: </label>
  <input type="text" id="username">
  <button id="checkButton" onclick="checkUsername()">Submit</button>

  <script>
    function checkUsername() {
      var username = document.getElementById("username").value;

      if (username === "") {
        alert("Please enter your username.");
      } else {
        alert("Welcome, " + username + "!");
      }
    }
  </script>
</body>
</html>
```

```
}  
</script>  
</body>  
</html>
```

Screenshot

Fig. 1

Username:

Fig. 2

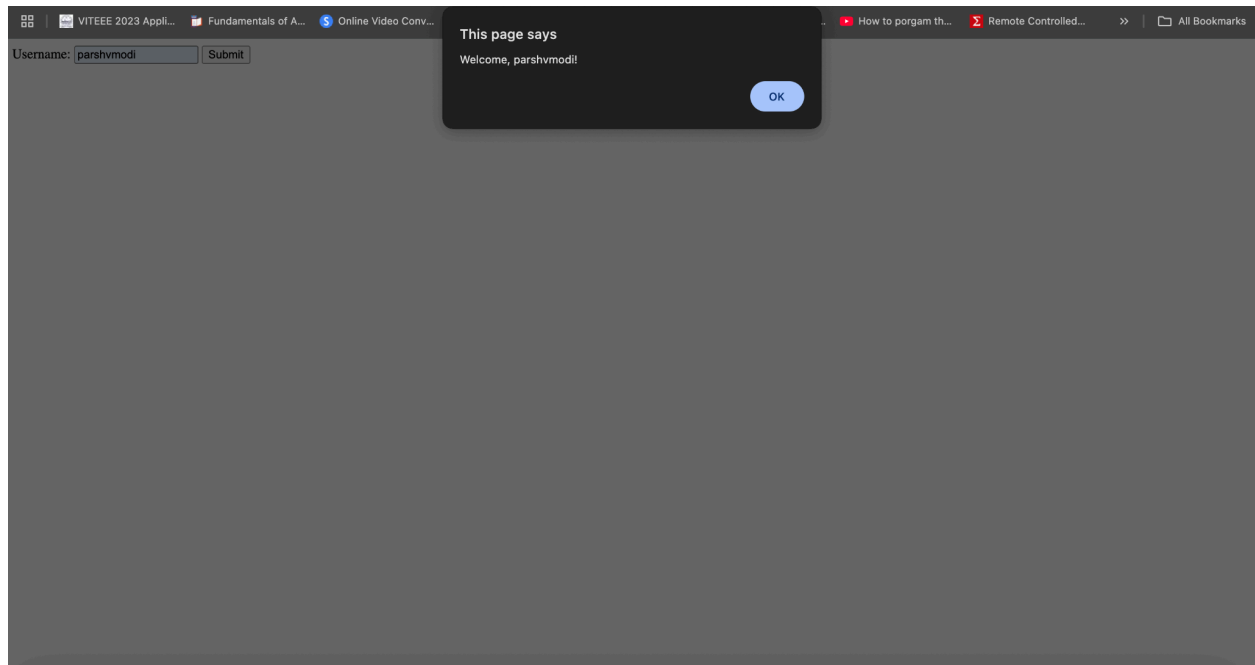
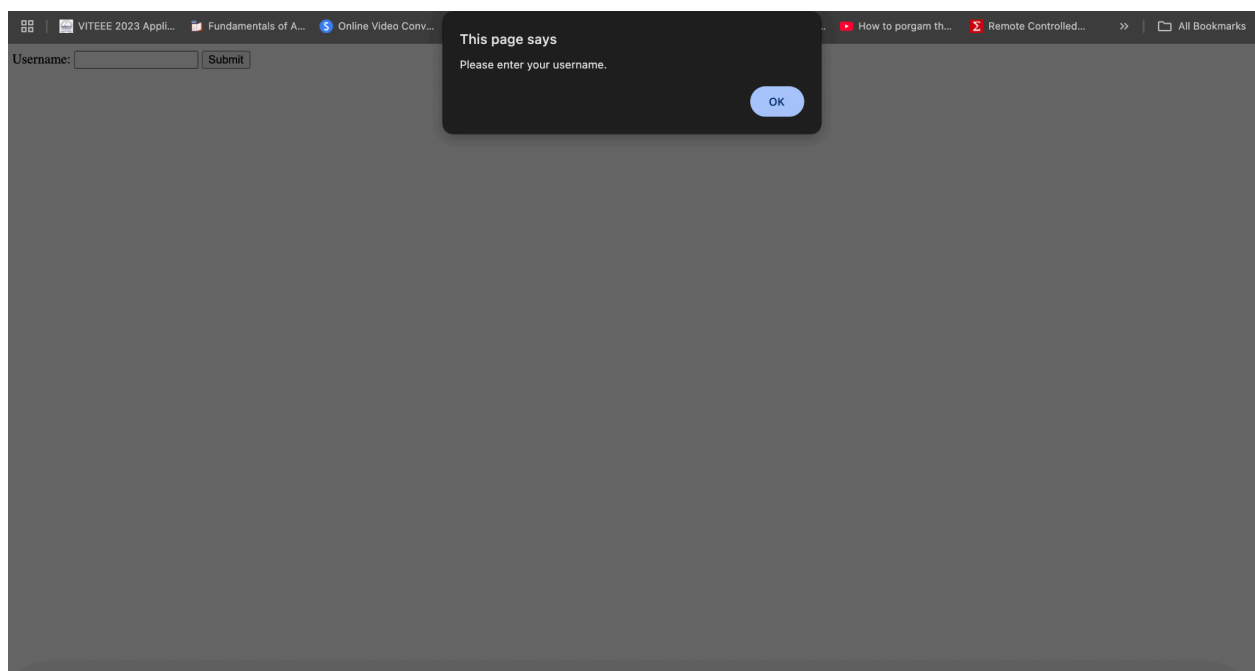


Fig. 3



2. Given a paragraph element with id infoText, and a button with id toggleBtn, write

JavaScript code to:

a. Toggle the visibility of the paragraph each time the button is clicked.

b. Change the button text to “Hide” when the paragraph is visible and to “Show” when it is hidden.

```
HTML
<!DOCTYPE html>
<head>
  <title>Toggle Visibility</title>
</head>
<body>
  <p id="infoText">This toggle button was created by 23BCE10807.</p>
  <button id="toggleBtn" onclick="toggleVisibility()">Hide</button>

  <script>
    function toggleVisibility() {
      var paragraph = document.getElementById("infoText");
      var button = document.getElementById("toggleBtn");

      if (paragraph.style.display === "none") {
        paragraph.style.display = "block";
        button.innerHTML = "Hide";
      } else {
        paragraph.style.display = "none";
        button.innerHTML = "Show";
      }
    }
  </script>
</body>
</html>
```

Screenshot

Fig. 1

Show

Fig. 2

This toggle button was created by 23BCE10807.

Hide

- 3. Create a HTML page for following exercise and write a JavaScript program that performs the following DOM operations on a web page:**
- a. Changes the text of an element with the id title to "JavaScript DOM Example".**
 - b. Adds a new element with the text "New Item" to an unordered list with the id itemList.**
 - c. Changes the background color of all elements with the class highlight to yellow.**

HTML

```
<!DOCTYPE html>
<head>
  <title>DOM Manipulation</title>
</head>
<body>
  <h1 id="title">Old Title</h1>
  <ul id="itemList">
    <li>Item 1</li>
    <li>Item 2</li>
  </ul>
  <div class="highlight">This is highlighted.</div>
  <div class="highlight">This is also highlighted.</div>

  <script>
    document.addEventListener("DOMContentLoaded", function() {

      document.getElementById("title").innerText = "Javascript DOM Example";
      console.log("Title changed to: ",
document.getElementById("title").innerText);

      // const newItem = document.createElement('li');
      // newItem.innerText = "Item added by JavaScript";
      // document.getElementById('itemlist').appendChild(newItem);
```

```
// console.log("New item added to the list: ", newItem.innerText);
const itemList = document.getElementById('itemList');
var newItem = document.createElement('li');
newItem.innerText = "New Item";
itemList.appendChild(newItem);
console.log("New item added:", newItem.innerText);

const highlightedElements = document.querySelectorAll('.highlight');
highlightedElements.forEach(function(element) {
    element.style.backgroundColor = "yellow";
    console.log('Element ${index + 1} background color changed to
yellow');
});
});
</script>
</body>
</html>
```

Screenshot

Fig. 1

Javascript DOM Example

- Item 1
- Item 2
- New Item

This is highlighted.
This is also highlighted.