

UIT2602 WEB PROGRAMMING

Ex. No 07: AJAX Integration

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Aim:

To demonstrate the integration of AJAX (Asynchronous JavaScript and XML) into a web application, enabling dynamic and interactive features such as live search, dynamic form submissions, and updating parts of the page without refreshing.

Procedure and Code:

Step 1: Setting Up the Files Create the following files in your project directory:

- search.html
- search.php
- submit.php
- dynamic-content.php

Step 2: Include the jQuery Library

```
<script  
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
```

Step 3: Live Search: Create input

```
<h2>Live Search</h2>  
<!-- Step 3: Live Search - Create input and search results container -->  
<input type="text" id="searchInput" placeholder="Search...">  
<div id="searchResults"></div>
```

Step 4: Attach an event listener to the input field to trigger an AJAX request whenever the user types in the search box

```
// Submit search form  
$('#searchInput').on('keyup', function(){  
    var searchText = $(this).val();  
    if(searchText !== ''){  
        $.ajax({
```

```

        url: 'search.php',
        method: 'POST',
        data: {query: searchText},
        dataType: 'json',
        success: function(response){
            displayResults(response);
        }
    });
} else {
    $('#searchResults').html('');
}
});

```

Step 5: Dynamic Form Submission

```

<h2>Dynamic Form Submission</h2>
<!-- Step 5: Dynamic Form Submission - Create form -->
<form id="myForm">
    <input type="text" name="username" placeholder="Username">
    <input type="email" name="email" placeholder="Email">
    <button type="submit">Submit</button>
</form>

```

Step 6: Intercept the form submission using AJAX to prevent the default behavior, then submit the form data asynchronously.

```

// Step 6: Intercept the form submission using AJAX to prevent the default
behavior, then submit the form data asynchronously
$('#myForm').submit(function(event) {
    event.preventDefault(); // Prevent default form submission
    var formData = $(this).serialize();
    $.ajax({
        url: 'submit.php', // URL to your server-side script handling form
        submission
        method: 'POST',
        data: formData,
        success: function(response) {
            // Handle success response
            console.log(response);
            $('#submitResponse').html(response); // Display the response
        },
        error: function(xhr, status, error) {
            // Handle error response
            console.error(error);
        }
    });
});

```

Step 7: Updating Parts of the Page Without Refreshing

```
<!-- Step 7: Updating Parts of the Page Without Refreshing -->
<h2>Dynamic Content</h2>
<div id="dynamicContent"></div>
```

Step 8: Use AJAX to fetch new content from the server and update the container periodically.

```
// Step 8: Use AJAX to fetch new content from the server and update the container
periodically
function updateDynamicContent() {
    $.ajax({
        url: 'dynamic-content.php', // URL to your server-side script
        // returning dynamic content
        method: 'GET',
        success: function(response) {
            $('#dynamicContent').html(response);
        }
    });
}
```

Output:

(i) **Live Search**

Live Search

Strawberry: Small, red fruit with seeds on the outside and a sweet flavor.

Live Search

Pineapple: A tropical fruit with a spiky skin and sweet, juicy flesh.

Mango: A tropical fruit with a sweet, juicy flesh and a distinctive aroma.

Watermelon: Large, juicy fruit with green skin and pink or red flesh.

(ii) Dynamic Form Submission

Dynamic Form Submission

Form submitted successfully! Username: Vasundhara Email: vasundhara2110257@ssn.edu.in

(iii) Dynamic Content

Dynamic Content

This is dynamic content fetched from the server at 2024-04-15 16:28:24

Conclusion:

Incorporating AJAX into web applications allows for enhanced user experience by enabling dynamic and interactive features. AJAX facilitates smoother communication between the client and server, resulting in a more responsive and engaging user interface.