READ DATA

AJAX (Asynchronous JavaScript and XML) is a technique used in web development to fetch or send data to a server asynchronously, without requiring a page refresh. Below is a step-by-step tutorial on how to read data using AJAX, including both text instructions and code examples.

Step 1: Include jQuery (Optional)

You can use vanilla JavaScript for AJAX, but using a library like jQuery makes it simpler. Make sure to include jQuery in your HTML file if you choose this option.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>AJAX Tutorial</title>
    <!-- Include jQuery -->
```

```
    <script
src="https://code.jquery.com/jquery-3.6.4.min.js"></script>
</head>
<body>
    <!-- Your content goes here -->
</body>
</html>
```

Step 2: Create HTML Elements

Add HTML elements that will be used to display the fetched data.

```html
<!-- Your content goes here -->
<div id="result"></div>
<button onclick="loadData()">Load Data</button>
```

Step 3: Write JavaScript Function

Write a JavaScript function to make an AJAX request and handle the

response.

```html
<script>

    function loadData() {

        // Your AJAX code will go here

    }

</script>
```

Step 4: Write AJAX Code

Inside the `loadData` function, write the AJAX code using either vanilla JavaScript or jQuery.

Using jQuery:

```html
<script>

    function loadData() {

        $.ajax({

            url: 'https://api.example.com/data', // Replace with your
```

API endpoint

```
                method: 'GET',

                dataType: 'json', // Change to 'text' if expecting plain
text

                success: function(data) {

                        // Handle the successful response

                        $('#result').html('Data: ' + data);

                },

                error: function(error) {

                        // Handle errors

                        console.error('Error fetching data:', error);

                }

        });

    }
</script>
```

Using Vanilla JavaScript:

```html
<script>
```

```
function loadData() {

        var xhr = new XMLHttpRequest();

        xhr.open('GET', 'https://api.example.com/data', true);

        xhr.onreadystatechange = function () {

                if (xhr.readyState == 4 && xhr.status == 200) {

                        // Handle the successful response

                        document.getElementById('result').innerHTML =
'Data: ' + xhr.responseText;

                } else if (xhr.readyState == 4) {

                        // Handle errors

                        console.error('Error fetching data:', xhr.status);

                }

        };

        xhr.send();

    }
</script>
```