**JQUERY ASSIGNMENT**

1. **what is jQuery?**

**Ans: -** jQuery is a lightweight, "write less, do more", JavaScript library.

The purpose of jQuery is to make it much easier to use JavaScript on your website.

jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.

jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

jQuery was particularly popular in the early days of web development when there were significant inconsistencies in how different browsers implemented JavaScript. While its usage has declined somewhat with the rise of modern JavaScript frameworks like React, Angular, and etc.

1. **How to Apply CSS Using jQuery, How to Add Class and Remove Class in**

**jQuery, jQuery Animation?**

Ans: - Applying CSS using jQuery involves selecting HTML elements and manipulating their styles using jQuery methods. Here's a brief overview of how you can achieve this, along with examples for adding and removing classes, as well as performing animations:

**Applying CSS Using jQuery:**

You can use the CSS () method in jQuery to apply styles to HTML elements. The method takes a JavaScript object where keys are CSS properties, and values are the corresponding values for those properties.

We can use jQuery to apply CSS styles to HTML elements dynamically. The “css ()” method in jQuery allows you to get or set the CSS properties of elements.

Example: -

<script>

$(document). ready (function () {

$('#my Paragraph').CSS ({

'color': 'blue',

'Font-size': '18px'

});

});

</script>

**Adding and Removing Classes:**

You can use the addClass () and removeClass () methods to add and remove classes, respectively.

jQuery provides methods to add and remove classes from HTML elements. These methods are “addClass ()” and “removeClass ()”.

Example: -

<script>

$(document). ready (function () {

// Adding a class

$('#myParagraph'). addClass('highlight');

// Removing a class after a delay

setTimeout (function () {

$('#myParagraph'). removeClass('highlight');

}, 2000);

});

</script>

**jQuery Animation:**

You can use the animate () method to perform animations. The animate () method allows you to animate a set of CSS properties.

jQuery provides built-in methods for simple animations. The “animate ()” method is commonly used for this purpose. It allows you to animate CSS properties.

Example: -

<body>

<div id="animatedBox"></div>

<script>

$(document). ready (function () {

// Animation using jQuery

$('#animatedBox'). animate ({

'width': '200px',

'height': '200px',

'Margin-left': '50px'

}, 1000);

});

</script>

</body>

1. **How to create slider with animation?**

**Ans: -** jQuery has the following slide methods:

slideDown ()

slideUp ()

slideToggle ()

**1. slide down ()**: -

The jQuery slideDown () method is used to slide down an element.

The optional speed parameter specifies the duration of the effect. It can take the following values: "slow", "fast", or milliseconds.

The optional callback parameter is a function to be executed after the sliding completes.

The following example demonstrates the slideDown () method:

e.g. $(selector). slideDown (speed, callback);

Example: -

<script>

$(document). Ready (function () {

$("#flip"). Click (function () {

$("#panel"). slideDown("slow");

});

});

</script>

**2. slide up (): -**

The jQuery slideUp () method is used to slide up an element.

The optional speed parameter specifies the duration of the effect. It can take the following values: "slow", "fast", or milliseconds.

The optional callback parameter is a function to be executed after the sliding completes.

The following example demonstrates the slideUp () method:

e.g. $(selector). slideUp (speed, callback);

example: -

<script>

$(document). Ready (function () {

$("#flip"). Click (function () {

$("#panel"). slideUp("slow");

});

});

</script>

**3. slide toggle (): -**

The jQuery slideToggle () method toggles between the slideDown () and slideUp () methods.

The jQuery slideToggle () method toggles between the slideDown () and slideUp () methods.

If the elements have been slid down, slideToggle () will slide them up.

If the elements have been slid up, slideToggle () will slide them down.

The optional speed parameter can take the following values: "slow", "fast", milliseconds.

The optional callback parameter is a function to be executed after the sliding completes.

The following example demonstrates the slideToggle () method:

e.g. $(selector). slideToggle (speed, callback);

example: -

<script>

$(document). Ready (function () {

$("#flip"). Click (function () {

$("#panel"). slideToggle("slow");

});

});

</script>

1. **Event bubbling tickling example.**

**Ans:** - Event bubbling is a method of event propagation in the HTML DOM API when an event is in an element inside another element, and both elements have registered a handle to that event. It is a process that starts with the element that triggered the event and then bubbles up to the containing elements in the hierarchy. In event bubbling, the event is first captured and handled by the innermost element and then propagated to outer elements.

Example: -

<script>

document. getElementById (

"child"). addEventListener ("click", function () {

alert ("You clicked the Child element!");

}, false);

document. getElementById (

"parent"). addEventListener ("click", function () {

alert ("You clicked the parent element!");

}, false);

</script>