

jQuery Assignment

Q-1 What is jQuery?

- jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers.

-DOM Manipulation: jQuery simplifies the process of selecting DOM elements and performing actions on them, like changing their content, style, or position on the page.

Event Handling: It provides an efficient way to handle events, such as user interactions like clicks, mouse movements, key presses, etc.

Ajax: jQuery has methods to facilitate asynchronous HTTP requests, allowing you to update parts of a web page without reloading the entire page.

Animations: Creating animations and effects on web pages becomes easier with jQuery. It offers methods to animate elements or add predefined effects.

Cross-browser Compatibility: One of the key benefits of jQuery is that it handles the differences in how various browsers implement JavaScript, providing a consistent experience for developers.

Q-2 How to Apply CSS Using JQuery, How to Add Class and Remove Class in JQuery ,JQuery Animation?

`-.css():`

This method can get or set one or more CSS properties for selected elements.

Example of setting CSS properties:

```
$(element).css("color", "red");
```

`--addClass():`

Adds one or more class names to selected elements.

Example:

```
$(element).addClass("new-class");
```

```
---.removeClass():
```

Removes one or more class names from selected elements.

Example:

```
$(element).removeClass("old-class");
```

---jQuery Animation:

```
animate():
```

Animates the CSS properties of elements.

Example:

```
$(element).animate({  
    opacity: 0.5,  
    left: '+=50',  
    height: 'toggle'  
}, 1000);
```

Q-3 How to create slider with animation?

- Creating a slider with animation typically involves using HTML, CSS, and JavaScript/jQuery. Here's a basic example of creating a simple image slider with jQuery animation:

Html Structure

```
<div class="slider">
```

```
<div class="slides">

    <div class="slide"></div>

    <div class="slide"></div>

    <div class="slide"></div>

</div>

</div>
```

--CSS

```
.slider {

    width: 100%;

    overflow: hidden;

}

.slides {

    display: flex; /* Flexbox for horizontal arrangement */

    transition: transform 0.5s ease; /* Animation transition */

}

.slide {

    flex: 0 0 100%; /* Each slide takes full width */

}

img {

    width: 100%; /* Ensure images fill their containers */

}
```

javascript(jquary)

```
$(document).ready(function() {  
    var $slider = $('#slider');  
    var $slides = $('#slides');  
    var slideWidth = $('#slide').width();  
    var slideCount = $('#slide').length;  
    var currentSlide = 1;  
  
    // Set width of slides container to accommodate all slides  
    $slides.width(slideWidth * slideCount);  
  
    // Previous button click  
    $('#prev').click(function() {  
        if (currentSlide > 1) {  
            currentSlide--;  
            moveSlider();  
        }  
    });  
  
    // Next button click  
    $('#next').click(function() {  
        if (currentSlide < slideCount) {  
            currentSlide++;  
            moveSlider();  
        }  
    });  
});
```

```
// Function to move the slider  
function moveSlider() {  
    var slidePosition = (currentSlide - 1) * -slideWidth;  
    $slides.animate({ left: slidePosition }, 500);  
}  
});
```