

Module 7) JQuery Basic, Effects & Advanced

Q-1) What is jQuery?

Ans:

jQuery is a popular JavaScript library designed to simplify client-side scripting of HTML. It helps in handling tasks like HTML document traversal and manipulation, event handling, animation, and AJAX interactions. jQuery simplifies complex tasks by providing a concise and easy-to-use API that works across different browsers, abstracting away many of the browser-specific complexities that developers used to face. It was widely adopted for its ability to make web development faster and more efficient, although in recent years, native JavaScript has gained traction, reducing the reliance on jQuery due to advancements in modern browsers and their support for standardized JavaScript functionalities.

Many of the biggest companies on the Web use jQuery, companies such as: Google, Microsoft, IBM, Netflix....

The jQuery library contains the following features: HTML/DOM manipulation, CSS manipulation, HTML event methods, Effects and animations.

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

Ans:

You can use jQuery to apply CSS styles to HTML elements. Here's an example of changing the background color of an element with the ID "myElement":

// Applying CSS using jQuery:

```
$(document).ready(function () {  
    $("#button").click(function () {  
        $("#box").css("background-color","red")  
    })  
})
```

jQuery provides methods to add or remove classes from HTML elements.

Adding a class:

// Applying Addclass using jQuery:

```
$(document).ready(function () {  
    $("#addclass").click(function () {  
        $("#box").addClass("bg padding font")  
    })  
})
```

// Applying removeclass using jQuery:

```
$(document).ready(function () {  
    $("#removeclass").click(function () {  
        $("#box").removeClass("bg padding font")  
    })  
})
```

//jQuery Animation:

The animate() method performs a custom animation of a set of CSS properties.

```
$(document).ready(function () {  
    $("#addclass").click(function () {  
        $("p").animate({ opacity: 0.2 }, 1000);  
    });  
});
```

Q-3)How to create slider with animation?

Ans:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8" />
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
```

```
  <title>Simple Slider</title>
```

```
  <style>
```

```
    .slider-container {  
      width: 100%;  
      overflow: hidden;  
    }
```

```
    .slider {  
      display: flex;  
      transition: transform 0.5s ease-in-out;  
    }
```

```
    .slide {  
      flex: 0 0 100%;  
    }
```

```
    img {  
      width: 100%;  
    }
```

```
</style>

<script src="https://code.jquery.com/jquery-3.6.4.min.js"></script>

</head>

<body>

  <div class="slider-container">

    <div class="slider">

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

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

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

    </div>

  </div>

  <script>

    $(document).ready(function () {

      // Set up variables

      var currentIndex = 0;

      var items = $(".slide");

      var totalItems = items.length;

      // Function to show the next slide

      function showNextSlide() {

        if (currentIndex < totalItems - 1) {

          currentIndex++;

        }

      }

    });

  </script>

</body>

</html>
```

```

    } else {
        currentIndex = 0;
    }
    updateSlider();
}

// Function to update the slider position
function updateSlider() {
    var newPosition = -currentIndex * 100 + "%";
    $(".slider").css("transform", "translateX(" + newPosition + ")");
}

// Set interval for automatic slide change
setInterval(showNextSlide, 3000); // Change slide every 3 seconds
});
</script>
</body>

</html>

```

Q-4) Event bubbling tickling example.

```

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8" />

```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>Document</title>
<style>
  div {
    margin: 10px;
    padding: 15px;
    border: solid 2px red;
  }
</style>
</head>

<body>
  <h2>Bubbling Event in Javascript</h2>

  <div id="parent">
    parent div
    <div id="child">child div</div>

  </div>

  <script>

    document.getElementById("child").addEventListener("click", function ()
{alert("You clicked the Child element!");
    },
  );
```

```
document.getElementById("parent").addEventListener( "click", function () {  
    alert("You clicked the parent element!");  
    },  
    );  
</script>
```

```
</body>
```

```
</html>
```