

1. What is jQuery?

jQuery is a popular open-source JavaScript library full of pre-built code solutions that make it much easier to use JavaScript on your website.

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

- You can apply CSS styles to HTML elements using jQuery's `css()` method.

```
<!DOCTYPE html>
<html>
<head>
  <script src="
https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
</head>
<body>
  <div id="myDiv">This is a div element</div>

  <script>
    $(document).ready(function() {
      // Apply CSS styles to the element with the id 'myDiv'
      $("#myDiv").css({
        "color": "blue",
        "font-size": "24px",
        "background-color": "yellow"
      });
    });
  </script>
</body>
</html>
```

- Adding and Removing Classes Using jQuery

```
<!DOCTYPE html>
<html>
<head>
  <script src="
https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.1/jquery.min.js "></script>
</head>
<body>
  <div id="myDiv">This is a div element</div>

  <script>
    $(document).ready(function() {
      // Add a class to the element
      $("#myDiv").addClass("highlight");
    });
  </script>
</body>
</html>
```

```

        // Remove a class from the element
        $("#myDiv").removeClass("highlight");
    });
</script>
</body>
</html>

```

- **jQuery Animation:**

```

<!DOCTYPE html>
<html>
<head>
    <script src="
https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.1/jquery.min.js "></script>
</head>
<body>
    <div id="myDiv">This is a div element</div>

    <script>
        $(document).ready(function() {
            // Animate the element's left margin to 200px over 2 seconds
            $("#myDiv").animate({
                marginLeft: "200px"
            }, 2000);
        });
    </script>
</body>
</html>

```

3. How to create slider with animation?

Index.html File :

```

1 <!-- index.html -->
2 <!DOCTYPE html>
3 <html>
4
5 <head>
6 </head>
7 <style>
8     slider {
9         width: 100%;
10        overflow: hidden;
11        position: relative;
12    }
13
14    .slide {
15        width: 100%;
16        display: none;
17    }
18
19    img {
20        width: 100%;
21        height: auto;
22    }
23 </style>
24
25 <body>
26     <div class="slider">
27         <div class="slide">
28             
30         </div>
31         <div class="slide">
32             
34         </div>
35         <div class="slide">
36             
38         </div>
39     </div>
40     <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
41     <script src="slider.js"></script>
42 </body>
43
44 </html>

```

Javascript file :

```

1 // slider.js
2 $(document).ready(function() {
3     // Initialize variables
4     var currentSlide = 0;
5     var slides = $('.slide');
6     var slideCount = slides.length;
7
8     // Function to show a specific slide
9     function showSlide(index) {
10         slides.eq(currentSlide).fadeOut();
11         slides.eq(index).fadeIn();
12         currentSlide = index;
13     }
14
15     // Start the slideshow
16     showSlide(0);
17
18     // Automatic slideshow
19     var interval = setInterval(function() {
20         var nextSlide = (currentSlide + 1) % slideCount;
21         showSlide(nextSlide);
22     }, 3000); // Change slide every 3 seconds (adjust as needed)
23 });

```

4. Event bubbling tickling example

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8   <script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
9 </head>
10 <body>
11   <div>
12     <ul>
13       <li>
14         <span>span</span>
15       </li>
16     </ul>
17   </div>
18   <script>
19     $(document).ready(function () {
20       $("span").parents().css({ "border": "2px solid red" , "padding": "20px" })
21       $("span").css({ "border": "2px solid grey", "padding": "5px 500px" })
22     })
23   </script>
24 </body>
25
26 </html>
```

Output :

