Module – 5 (jQuery Basic, Effects & Advanced)

Que. 1:- What is jQuery?

Ans.:- jQuery is a fast and concise JavaScript library designed to simplify web development tasks. jQuery simplifies HTML document traversing, event handling, animating, and Ajax interactions for web developers. It provides a set of easy-to-use functions and methods that allow you to manipulate HTML elements, create animations, handle events, and make asynchronous requests to web servers with ease.

jQuery is particularly known for its cross-browser compatibility, which means it can help developers write code that works consistently in different web browsers, even in older versions that might have varying levels of support for standard web technologies.

Que. 2:- How to Apply CSS Using jQuery, How to Add Class and Remove Class in jQuery, jQuery Animation?

Ans.:-

- Applying CSS using jQuery:-

```html
<!DOCTYPE html>
<html>

<head>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>

<body>
    <div id="myElement">This is a div element.</div>
    <script>
        $(document).ready(function () {
            $('#myElement').css({
                'color': 'white',
                'font-size': '20px',
                'background-color': 'blue'
            });
        });
    </script>
</body>

</html>
```

Output:-

This is a div element.

- Adding and Removing Classes using jQuery:-

```html
<!DOCTYPE html>
<html>

<head>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>

<body>

    <div id="myElement">Good Morning!</div>

    <script>
        $(document).ready(function () {
            $('#myElement').addClass('myClass');
            $('#myElement').removeClass('myClass');
        });
    </script>

</body>

</html>
```

Output:-

Good Morning!

- jQuery Animation:-

```html
<!DOCTYPE html>
<html>

<head>
    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
</head>

<body>

    <div id="ani" style="width: 100px; height: 100px; background-color: red;"></div>

    <script>
        $(document).ready(function () {
            $('#ani').animate({
                width: '300px',
                height: '300px',
            }, 3000);
        });
    </script>

</body>

</html>
```
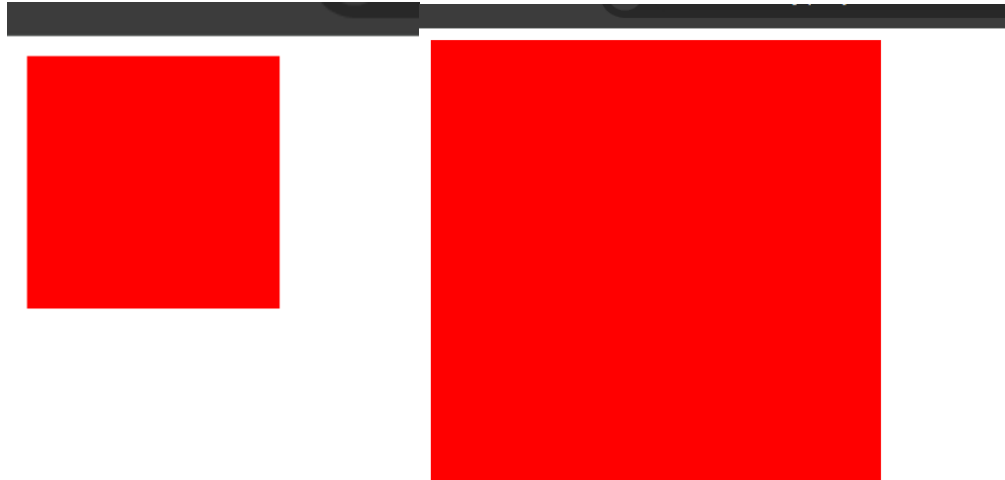
Output:-

Que. 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>Document</title>

  <style>

    .slider-container {

      position: relative;

      width: 100%;

      overflow: hidden;

      height:300px;

```
      }

      .slider {
        display: flex;
        transition: transform 0.5s ease-in-out;
      }
      .slide {
        flex: 0 0 100%;
      }
    </style>
  </head>
  <body>
    <div class="slider-container">
      <div class="slider">
        <div class="slide">
          <img
src="https://th.bing.com/th/id/OIP.qBks8TKpCJCW3vQSKK2ScwHaGy?w=208&h=190&c
=7&r=0&o=5&dpr=1.3&pid=1.7"
          alt="Slide 1">
        </div>
        <div class="slide">
          <img
src="https://th.bing.com/th/id/OIP.xP_QSK19NJAPy8_srqEWqAHaE8?w=273&h=183&c=
7&r=0&o=5&dpr=1.3&pid=1.7"
          alt="Slide 2">
        </div>
        <div class="slide">
          <img
src="https://th.bing.com/th/id/OIP.avb9nDfw3kq7NOoP0grM4wHaEK?w=252&h=180&c=
7&r=0&o=5&dpr=1.3&pid=1.7"
          alt="Slide 3">
```

```html
      </div>
    </div>
    <button class="prev-button">Previous</button>
    <button class="next-button">Next</button>
  </div>
<script>
    const slider = document.querySelector('.slider');
    const slides = document.querySelectorAll('.slide');
    const prevButton = document.querySelector('.prev-button');
    const nextButton = document.querySelector('.next-button');
    let currentIndex = 0;
    function goToSlide(index) {
       if (index < 0) {
          index = slides.length - 1;
       } else if (index >= slides.length) {
          index = 0;
       }
       currentIndex = index;
       const translateX = -currentIndex * 100 + '%';
       slider.style.transform = `translateX(${translateX})`;
    }
    prevButton.addEventListener('click', () => {
       goToSlide(currentIndex - 1);
    });
    nextButton.addEventListener('click', () => {
       goToSlide(currentIndex + 1);
    });
    goToSlide(0);
    let autoPlayInterval;
```

```
function startAutoPlay() {

    autoPlayInterval = setInterval(() => {

        goToSlide(currentIndex + 1);

    }, 2000);

}

function stopAutoPlay() {

    clearInterval(autoPlayInterval);

}

slider.addEventListener('mouseenter', stopAutoPlay);

slider.addEventListener('mouseleave', startAutoPlay);

startAutoPlay();

</script>

</body>

</html>
```

Que. 4:- Event bubbling tickling example.

Ans.:-

```
<!DOCTYPE html>

<html>

<head>

<style>

.ancestors * {

  display: block;

  border: 2px solid lightgrey;

  color: lightgrey;

  padding: 5px;

  margin: 15px;

}

</style>
```

```html
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
<script>
$(document).ready(function(){
  $("span").parents().css({"color": "red", "border": "2px solid red"});
});
</script>
</head>
<body class="ancestors">body (great-great-grandparent)
  <div style="width:500px;">div (great-grandparent)
    <ul>ul (grand parent)
      <li>li (direct parent)
        <span>span</span>
      </li>
    </ul>
  </div>
</body>
</html>
```