JQuery Basic, Effects & Advanced

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.

The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

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

Ans. => jQuery has several methods for CSS manipulation. We will look at the following methods:

- addClass() - Adds one or more classes to the selected elements
- removeClass() - Removes one or more classes from the selected elements
- toggleClass() - Toggles between adding/removing classes from the selected elements
- css() - Sets or returns the style attribute

The following example shows how to add class attributes to different elements.

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

<head>
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
  <script>
    $(document).ready(function () {
      $("button").click(function () {
        $("h1, h2, p").addClass("blue");
        $("div").addClass("important");
      });
    });
  </script>
  <style>
    .important {
      font-weight: bold;
      font-size: xx-large;
    }

    .blue {
      color: blue;
    }
  </style>
</head>

<body>

  <h1>Heading 1</h1>
  <h2>Heading 2</h2>

  <p>This is a paragraph.</p>
  <p>This is another paragraph.</p>

  <div>This is some important text!</div><br>

  <button>Add classes to elements</button>
```

```
</body>

</html>
```

The jQuery **animate()** method is used to create custom animations.

Syntax:

$(*selector*).animate({*params*},*speed,callback*);

The required params parameter defines the CSS properties to be animated.

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 animation completes.

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

<head>
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>
  <script>
    $(document).ready(function () {
      $("button").click(function () {
        $("div").animate({ left: '250px' });
      });
    });
  </script>
</head>

<body>

  <button>Start Animation</button>


  <p>By default, all HTML elements have a static position, and cannot be
moved. To manipulate the position, remember
```

```
        to first set the CSS position property of the element to relative, fixed, or
absolute! </p>

    <div
style="background:#98bf21;height:100px;width:100px;position:absolute;"></di
v>

</body>

</html>
```

3.) How to create slider with animation?

Ans. => The jQuery UI Slider plugin makes selected elements into sliders.
There are various options such as multiple handles and ranges. The handle can
be moved with the mouse or the arrow keys. The slider widget will create
handle elements with the class ui-slider-handle on initialization.

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

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Document</title>
    <!-- bxslider css cdn -->
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/bxslider/4.2.15
/jquery.bxslider.css" />
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/bxslider/4.2.15
/jquery.bxslider.min.css" />
    <style>
        img{
            width: 100%;
            height: 620px;
        }
    </style>
```

```html
</head>

<body>
    <div class="myslider">
        <div class="slider1 slider">
            <img src="https://images.unsplash.com/photo-
1653832920135-
f33298ea0801?w=500&auto=format&fit=crop&q=60&ixlib=rb-
4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDIxfDZzTVZqVExTa2VRf
HxlbnwwfHx8fHw%3D"
                alt="">
        </div>
        <div class="slider2 slider">
            <img src="https://images.unsplash.com/photo-
1653832919568-
8aac81463eb2?w=500&auto=format&fit=crop&q=60&ixlib=rb-
4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDIzfDZzTVZqVExTa2VRf
HxlbnwwfHx8fHw%3D"
                alt="">
        </div>
        <div class="slider3 slider">
            <img src="https://images.unsplash.com/photo-
1484604234936-
eb54b8c10f6f?w=500&auto=format&fit=crop&q=60&ixlib=rb-
4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDM5fDZzTVZqVExTa2VRf
HxlbnwwfHx8fHw%3D"
                alt="">
        </div>
        <div class="slider4 slider">
            <img src="https://images.unsplash.com/photo-
1589642314445-
999ac13b0075?w=500&auto=format&fit=crop&q=60&ixlib=rb-
4.0.3&ixid=M3wxMjA3fDB8MHx0b3BpYy1mZWVkfDQxfDZzTVZqVExTa2VRf
HxlbnwwfHx8fHw%3D"
                alt="">
        </div>
    </div>
    <!-- jquery cdn -->
```

```html
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.7.1/jqu
ery.min.js"></script>
    <!-- bxslider js cdn -->
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/bxslider/4.2.15/
jquery.bxslider.min.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/bxslider/4.2.15/
jquery.bxslider.js"></script>
    <script
src="https://cdnjs.cloudflare.com/ajax/libs/bxslider/4.2.15/
vendor/jquery.easing.1.3.js"></script>
    <script>
        $(document).ready(function () {
            $(".myslider").bxSlider({
                mode: "fade",
            })
        })
    </script>
</body>

</html>
```