# Module 05 – JQUERY

1. What is jQuery?

* jQuery is a popular JavaScript library designed to simplify web development. 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.
* Some key features of jQuery include:

1. DOM Manipulation: jQuery allows developers to easily select and manipulate HTML elements on a webpage. It provides a rich set of methods for traversing and manipulating the Document Object Model (DOM).
2. Event Handling: jQuery simplifies event handling by providing methods to bind and unbind event handlers to HTML elements. This allows developers to easily respond to user interactions such as clicks, keystrokes, and form submissions.
3. AJAX Support: jQuery includes built-in functions for making asynchronous HTTP requests, known as AJAX (Asynchronous JavaScript and XML) requests. This enables developers to retrieve data from a server and update parts of a webpage without requiring a full page reload.
4. Animations and Effects: jQuery provides a set of methods for creating animations and adding visual effects to HTML elements. This allows developers to easily create smooth transitions, fades, slides, and other dynamic effects.
5. Cross-browser Compatibility: jQuery handles the differences in browser implementations, making it easier to write code that works consistently across different web browsers.
6. How to Apply CSS Using JQuery, How to Add Class and Remove Class in Jquery, JQuery Animation?

* To apply CSS using jQuery, you can use the .css() method. This method allows you to get or set the CSS properties of an element. Here's an example of how to apply CSS using jQuery:

1. Add class

* The following example shows how to add class attributes to different elements. Of course, you can select multiple elements when adding classes:
* Example:

<!DOCTYPE html>

<html lang="en">

<head>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.4/jquery.min.js"></script>

  <title>Document</title>

</head>

<body>

  <p id="para">Hello World</p>

  <script>

    // Applying CSS using jQuery

    $(document).ready(function () {

      // Set the background color of an element

      $("#para").css("background-color", "black");

      // Set multiple CSS properties at once

      $("#para").css({

        "background-color": "black",

        color: "white",

        "font-size": "18px",

      });

    });

</script>

  </body>

</html>

1. Remove class

* To add and remove classes using jQuery, you can use the .addClass() and .removeClass() methods. These methods allow you to add or remove one or more classes from selected elements. Here's an example:
* Example:

<!DOCTYPE html>

<html>

  <head>

    <meta charset="UTF-8" />

    <meta http-equiv="X-UA-Compatible" content="IE=edge" />

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

    <title>Document</title>

    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.4/jquery.min.js"></script>

    <style>

      .blue {

        color: blue;

      }

    </style>

  </head>

  <body>

    <h1 class="blue">Heading 1</h1>

    <h2 class="blue">Heading 2</h2>

    <p class="blue">This is a paragraph.</p>

    <p>This is another paragraph.</p>

    <button>Remove class from elements</button>

    <script>

        $(document).ready(function () {

          $("button").click(function () {

            $("h1, h2, p").removeClass("blue");

          });

        });

      </script>

  </body>

</html>

1. Animation

<!DOCTYPE html>

<html lang="en">

  <head>

    <title>Animation</title>

    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.1/jquery.min.js"></script>

    <style>

      div {

        height: 150px;

        width: 150px;

        background-color: blue;

        position: relative;

      }

    </style>

  </head>

  <body>

    <div id="myElement"></div>

    <script>

      // jQuery animation

      $(document).ready(function () {

        // Animate the width of an element to 500px over 1 second

        $("#myElement").animate(

          {

            width: "500px",

          },

          1000

        );

        // Animate multiple properties at once

        $("#myElement").animate(

          {

            width: "500px",

            height: "300px",

          },

          1000

        );

      });

    </script>

  </body>

</html>

1. How to create slider with animation?

<!DOCTYPE html>

<html lang="en">

  <head>

    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.1/jquery.min.js"></script>

    <title>Document</title>

  </head>

  <body>

    <div class="column-right slide">

      <div><img src="slide-gordon-plant-14744195.jpg" alt="Road" /></div>

      <div><img src="slide-luka-peric-16863602.jpg" alt="Map" /></div>

    </div>

    <script>

      $(".slide").slick({

        autoplay: true,

        autoplaySpeed: 1000,

        dots: false,

        infinite: false,

        speed: 1000,

        fade: true,

        slide: "div",

        cssEase: "linear",

      });

    </script>

  </body>

</html>