JQuery

jQuery is an open-source JavaScript library that simplifies the interactions between an HTML/CSS document, or more precisely the Document Object Model (DOM), and JavaScript. Elaborating the terms, it simplifies HTML document traversing and manipulation, browser event handling, DOM animations, Ajax interactions, and cross-browser JavaScript development.

Example: In this example, we are using hover() and css() methods to change the style of heading content on mouse move over.

<!DOCTYPE html>

<html>

<head>

    <script src=

"<https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js>">

    </script>

    <script>

        $(document).ready(function() {

            $("h1").hover(function() {

                $(this).css("color", "green");

            }, function() {

                $(this).css("color", "aliceblue");

            });

        });

    </script>

</head>

<body>

    <h1>GeeksforGeeks</h1>

</body>

</html>

jQuery is widely famous with its philosophy of “Write less, do more.” This philosophy can be further elaborated as three concepts:

Finding some elements (via CSS selectors) and doing something with them (via jQuery methods) i.e. locate a set of elements in the DOM, and then do something with that set of elements.

Chaining multiple jQuery methods on a set of elements

Using the jQuery wrapper and implicit iteration

Basic syntax for any jQuery function is:

$(selector).action()

A $ sign is to define/access jQuery

A (selector) is to “query (or find)” HTML elements in html page

A jQuery action() is the action to be performed on the selected element(s)

jQuery Event methods:

Event refers to the actions performed by the site visitor during their interactivity with the website (or webpage).There can be various types of events such as

User clicks on the button.

User moves mouse pointer over an image.

User pressed any key from keyboard, etc.

Some of the events methods are given

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Method Name Description

click() The click() method contains an function for event handling which gets invoked when the user clicks on the particular HTML element.

dblclick() The dblclick() method contains an function for event handling which gets invoked when the user double clicks on the particular HTML element.

mouseenter() The mouseenter() method contains an function for event handling which gets invoked when mouse pointer enters the particular HTML element.

mouseleave() The mouseleave() method contains an function for event handling which gets invoked when mouse pointer is removed from the particular HTML element which was selected earlier.

mousedown() The mousedown() method contains an function for event handling which gets invoked when mouse left, right or middle button is pressed while the mouse pointer is over the HTML element.

mouseup() The mouseup() method contains an function for event handling which gets invoked when mouse left, right or middle button is released while the mouse pointer is over the HTML element.

hover() The hover() method contains an function for event handling which gets invoked when mouse pointer enter and leaves the HTML element. It is a combination of mouseenter() and mouseleave() methods.

Example:

|  |
| --- |
| <!DOCTYPE html>  <html>    <head>      <script src="<https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js>">  </script>  </head>    <body>      <p class="gfg">Welcome to Geeks for Geeks !</p>      <p class="GFG">Explore More about GfG </p>      <br/>      <button>Hide</button>      <script type="text/javascript">          $("button").click(function() {              $(".GFG").hide();          });      </script>  </body>    </html> |

Get and Set Methods:

jQuery has various methods to get the value of an attribute and set the attribute to specific value.There methods are powerful enough to the change the website content and its style. Some of them are:

text() – This method is used get or set the text content of selected HTML element.

html() – This method is used get or set the content of selected elements (including HTML elements).

val() – This method is used get or set the value of various form fields in the webpage.

attr() – This method is used get or set the value of various various attributes in the webpage.

css() – This method is used get or set the value of various CSS properties in the webpage.

Example :

Code :-

|  |
| --- |
| <!DOCTYPE html>  <html>    <head>      <script src="<https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js>">  </script>      <style type="text/css">          #e5 {              width: 100px;              height: 100px;              border-radius: 0px;              background-color: aqua;          }      </style>  </head>    <body>      <p id="e1">Welcome.</p>      <p id="e2">Learn and Explore</p>      <p>          <input type="text" id="e3" value="jQuery is powerful!" />      </p>      <p id="e4" align="left">Geeks for Geeks</p>      <p>          <div id="e5"></div>      </p>      <button id="gfg1">Change Text</button>      <button id="gfg2">Change HTML</button>      <button id="gfg3">Change Value</button>      <button id="gfg4">Change Alignment</button>      <button id="gfg5">Change Shape</button>      <script type="text/javascript">          $("#gfg1").click(function() {              $("#e1").text("Geeks for Geeks");          });          $("#gfg2").click(function() {              $("#e2").html("<b>Enrich your Knowledge.</b>");          });          $("#gfg3").click(function() {              $("#e3").val("jQuery at Geeks for Geeks");          });          $("#gfg4").click(function() {              $("#e4").attr("align", "center");          });          $("#gfg5").click(function() {              $("#e5").css("border-radius", "50px");          });      </script>  </body>    </html> |