my pat logo 🔍 HTML HR CSS Bootstrap JavaScript jquery React Redux Node Express MongoDB Mern DSAndAlgo

Home

Introduction

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

chaining()
chaining which means to chain together multiple methods in a single statement on a single element.. This way, browsers do not have to find the same element(s) more than once.
While using method chaining in jQuery, it ensures that there is no need to use the same selector more than once. Over-using a selector can seriously slow down your code, as every time you call on a selector you are forcing the browser to go looking for it. By combining or "chaining" multiple methods, you can seriously cut down on the number of times you make your browser look for the same elements without having to set any variables.

```
'<'p id="para">Chaining method in jQuery'<'/p>
'<'button>Click me'<'/button>


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

//assigning the color blue
$("#para").css("color", "blue")
//using slide up method
.slideUp(2000)

//using slide down method
.slideDown(2000).
slideUp(2000).
slideDown(4000);
});
});
```

jQuery selectors:

jQuery selectors are used to select the HTML element(s) and allows you to manipulate the HTML element(s) in a way we want. It selects the HTML elements on a variable parameter such as their name, classes, id, types, attributes, attribute values, etc. All selectors in jQuery are selected using a special sign i.e. dollar sign and parentheses:
$("selector-name")

Welcome to Geeks for Geeks !

This is Web Technology section

```
'<'button>Hide'<'/button>

'<'script type="text/javascript">'
$("button").click(function() {
$("h1").hide()
});
'<'/script>
```

Id Selector :
The id selector selects the element on the basis of its id.

Welcome to Geeks for Geeks !

Computer Science Portal

```
'<'button>Hide'<'/button>
'<'script type="text/javascript">
$("button").dblclick(function() {
$("#gfg").hide();
});
'<'/script>
```

Class Selector :
The class selector selects the element on the basis of its class.

Welcome to Geeks for Geeks !

Explore More about GfG

```
'<'button>Hide'<'/button>
'<'script type="text/javascript">
$("button").click(function() {
$(".GFG").hide();
});
'<'/script>
```

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

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.

'<'p id="e1">Welcome.

'<'p id="e2">Learn and Explore

'<'input type="text" id="e3" value="jQuery is powerful!" />

'<'p id="e4" align="left">Geeks for Geeks

```
'<'p>
'<'div id="e5"> '<'/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("Enrich your Knowledge.");
});
$("#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>
```

andSelf( )

used to add the previous set of elements to the current set. This method adds previous DOM tree elements to the current set and maintains them in the internal stack which will take care of changes to the matched set of elements.
andSelf( )(selector);

Parameters: It does not accept any parameter.
Return Value: It returns all added element against the specified selector.

```
'<'script>
$(document).ready(function() {
$("div").find("p").andSelf().addClass("border");
});
'</script>
```

```
'<'body>
'<'div>
'<'p>This is first paragraph.'</p>
'<'p>This is second paragraph.'</p>
```

Hide/Show, Toggle and Fading methods
jQuery hide() and show()

$(selector).hide(speed, callback);
$(selector).show(speed, callback);

For both syntaxes above, The speed parameter is a optional parameter used for defining the speed of hiding and showing of the content of html.

Fading Methods
$(selector).fadeIn(speed, callback);
The fadeIn() function is used to show a hidden element in HTML.

fadeOut() Method
$(selector).fadeOut(speed, callback);

The fadeOut() function is used to fade out(hide) a element in HTML.

fadeToggle()
$(selector).fadeToggle(speed, callback);
The fadeToggle() function is used to toggle between fadeIn() and fadeOut

fadeTo() Method :
$(selector).fadeTo(speed, opacity, callback);
The fadeTo() function allows fading of a element to a given opacity(range between 0 and 1) and this is a required field to fill in this function.

selectable() and accordion()

selectable and accordion which allows items to be selected and displayed in a logical manner.
Syntax
The selectable() method has two forms and the use of each form depends on the requirement.

$(selector, context).selectable (options);
$(selector, context).selectable ("action", [params]);,br/>

different options that can be used with selectable() method:
autoRefresh: If the value of this option is set to "true", it will allow the position and size of each selected element to be computed at the beginning of the selection operation. The default value this option is set to "true".
cancel: This option is used to forbids the selection of the DOM elements (selectable elements). If the value of this option is set to li, then it will prevent the selection of all list items in the web page. The default value of this option is textarea, input, button, option, select. This means that by default, these elements cannot be selected the web page.
delay: This option is used to produce the delay between the click of the user and the start of selection of item. The main purpose of this option is to avoid unwanted selections. The default value of this option is 0.
filterThis option is used to indicate the part of the element which is used to select the items. The default value of this option is * which indicates the the item can be selected by clicking anywhere on the item.
disabled: This option is used to disable the process of selection .When the value of this option is set to true, it disables the selection process.To enable the selection process, the enable option is used. The default value of this option is false.

```
'<'script>
$( function() {
$( "#select" ).selectable();
});
'</script>
'</head>
'<'body>
'<'h1 align="center">Geeks for Geeks'</h1>
'<'center>
'<'ol id="select">
'<'li class="ui-widget-content">Web Tech'</li>
'<'li class="ui-widget-content">Linux'</li>
'<'li class="ui-widget-content">DBMS'</li>
'<'li class="ui-widget-content">CBNST'</li>
'<'li class="ui-widget-content">Theory of Computation'</li>
'</ol>
'</center>
```

Accordion()
The main purpose of accordion is to break the page content into logical section.Each section consist of two parts –
Header *This part contains the title of the section. The header section is usually created using heading tags.*
Body *This part contains the content of the section.The body section is usually created using div tag.*

$(selector).accordion (options)
*$(selector).accordion ("action", params)***Collapsible Content:**To remove the default functionality, the collapsible option is set to true.

```
'<'script>
$(function() {
$( "#gfg" ).accordion({ collapsible: true});
});
'</script>
'</head>
'<'body>
'<'h1 align="center">Welcome to Geeks for Geeks'</h1>
'<'div id="gfg">
'<'h3>Web Technology'</h3>
'<'div>
'<'p> Web technology refers to the means by which computers communicate with each other using markup languages and
multimedia packages. '</p>
'</div>
'<'h3>CBNST'</h3>
'<'div>
'<'p> Computer Based Numerical and Statistical Techniques: CBNST is use to optimize performance and minimize error in
problem-solving application. '</p>
'</div>
'<'h3>Data Structures'</h3>
'<'div>
'<'p> A data structure is a particular way of organizing data in a computer so that it can be used effectively. '</p>
'</div>
'<'h3>Algorithms'</h3> '<'div>
'<'p> An algorithm is an unambiguous specification of how to solve a class of problems. Algorithms can perform calculation,
data processing and automated reasoning tasks. '</p>
'</div>
```

draggable() and droppable()

features such as dragging, dropping, date picker, tooltips, etc. then jQuery UI is perfect choice to build up these effects.

draggable

$(selector, context).draggable (options);
$(selector, context).draggable ("action", [params]);

different options that can be used with this method:
addClass: If the value of this option is set to false, it will prevent the DOM elements to be dragged . The default value this option is true.

axis: This option is used constrain the movement of the draggable object. If the value of this option is set to Y , then the object can be dragged in the vertical direction only and if the value of this option is set to X , then the object can be dragged into horizontal direction only.

containment: This option is also used constrain the movement of the draggable object within the specific region or some element.The default value this option is false.

opacity: This option is used to control the opacity of the draggable object while it is dragged.The default value this option is false.

```
'<'div id="d1">'<'p>Drag Me Anywhere'<'/p>'<'/div>
'<'div id="d2">'<'p>Drag Me Horizontally'<'/p>'<'/div>
'<'div id="d3">'<'p>Drag Me Vertically'<'/p>'<'/div>

'<'script type="text/javascript">
$( function() {
$("#d1").draggable();
} );
$( function() {
$("#d2").draggable({axis:"x"});
} );
$( function() {
$("#d3").draggable({axis :"y"});
} );
'<'/script>
```

Droppable()
$(selector, context).droppable (options)
$(selector, context).droppable ("action", params)

options that can be used with this method:

accept: The value of this option specifies that which draggable objects can be dropped on the specified target. The default vaue of this option is *.

addClass: If the value of this option is set to false, it will prevent the DOM elements to be dropped . The default value this option is true.

disable: This option is also used to disable the dropppable property of the DOM element.If the value of this option is set to ture , then the object cannot be dropped and if the value of this option is set to false, then the object can be dropped on the specified target.

```
'<'script>
$( function() {
$( "#drag" ).draggable();
$( "#non-drop" ).draggable();
$( "#drop" ).droppable(
{
accept:"#drag",
drop :function()
{
alert("I am dropped");
}
} );
} );
'<'/script>
```

```
'</head>
'<'body>
'<'center>
'<'h1 align="center">Welcome to GeeksforGeeks'</h1>
'<'div id="drag">
'<'p>Drag Me'</p>
'</div>
'<'div id="non-drop">
'<'p>Non droppable'</p>
'</div>
'<'div id="drop">
'<'p>Drop On Me'</p>
'</div>
'</center>
```

Animation, Slide methods

jQuery Animation:

Using animation, we can change the properties of HTML elements such as background colour, changing border styles, changing navigation properties, formatting the font properties, etc.

$("selector").animate(params, speed, callback);

```
'<'button id="animate">Animate Me'</button>
'<'script type="text/javascript">

$("#animate").click(function() {
$("div").animate({
width: "200px",
height: "200px",
borderRadius: "50%",
marginLeft: "210px",
marginTop: "70px",
},
2000,
);
});
'</script>
```

Slide

$(selector).slideDown(speed,callback);

```
'<'div id="f1">Slide down Effect'</div>
'<'div id="p1">Welcome to GeeksForGeeks.'</div>
'</center>

'<'script type="text/javascript">
$("#f1").click(function(){
$("#p1").slideDown("slow");
});
'</script>
```