**jQuery**

## Advantages of Using jQuery

If you're not familiar with jQuery, you might be wondering what makes jQuery so special. There are several advantages why one should opt for jQuery:

* **Save lots of time** — You can save lots of time and efforts by using the jQuery inbuilt effects and selectors and concentrate on other development work.
* **Simplify common JavaScript tasks** — jQuery considerably simplifies the common JavaScript tasks. Now you can easily create feature rich and interactive web pages with fewer lines of codes, a typical example is implementing Ajax to update the content of a page without refreshing it.
* **Easy to use** — jQuery is very easy to use. Anybody with the basic working knowledge of HTML, CSS and JavaScript can start development with jQuery.
* **Compatible with browsers** — jQuery is created with modern browsers in mind and it is compatible with all major modern browsers such as Chrome, Firefox, Safari, Internet Explorer, etc.
* **Absolutely Free** — And the best part is, it is completely free to download and use.
* <!DOCTYPE html>
* <html>
* <head>
* <meta charset="utf-8">
* <title>Simple HTML Document</title>
* <link rel="stylesheet" type="text/css" href="css/style.css">
* <script src="js/jquery-1.11.3.min.js"></script>
* </head>
* <body>
* <h1>Hello, World!</h1>
* </body>
* </html>

## Including jQuery from CDN

### jQuery's CDN provided by MaxCDN

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

## Creating Your First jQuery Powered Web Page

So far you have understood the purposes of jQuery library as well as how to include this in your document, now it's time to put jQuery into real use.

* <!DOCTYPE html>
* <html>
* <head>
* <meta charset="utf-8">
* <title>My First jQuery Powered Web Page</title>
* <link rel="stylesheet" type="text/css" href="css/style.css">
* <script src="js/jquery-1.11.3.min.js"></script>
* <script type="text/javascript">
* $(document).ready(function(){
* $("h1").css("color", "#0088ff");
* });
* </script>
* </head>
* <body>
* <h1>Hello, World!</h1>
* </body>
* </html>

# jQuery Syntax

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>jQuery Shorthand Syntax</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(function(){

// Some code to be executed...

alert("Hello World!");

});

</script>

</head>

<body>

<!--Contents will be inserted here-->

</body>

</html>

Coding:

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>jQuery Document Ready Demo</title>

<link rel="stylesheet" type="text/css" href="/examples/css/style.css">

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

$("p").text("Hello World!");

});

</script>

</head>

<body>

<p>Not loaded yet.</p>

</body>

</html>

Code-2

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>jQuery Click Handler Demo</title>

<link rel="stylesheet" type="text/css" href="/examples/css/style.css">

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

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

$("p").text("Hello World!");

});

});

</script>

</head>

<body>

<p>Not loaded yet.</p>

<button type="button">Replace Text</button>

</body>

</html>

# jQuery Selectors

## Selecting Elements with jQuery

## Selecting Elements by ID

You can use the ID selector to select a single element with the unique ID on the page.

For example, the following jQuery code will select and highlight an element having the ID attribute id="mark", when the document is ready to be manipulated.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>jQuery Select Element by ID</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

// Highlight element with id mark

$("#mark").css("background", "yellow");

});

</script>

</head>

<body>

<p id="mark">This is a paragraph.</p>

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

<p>This is one more paragraph.</p>

<p><strong>Note:</strong> The value of the id attribute must be unique in an HTML document.</p>

</body>

</html>

## Selecting Elements by Class Name

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>jQuery Select Element by Class</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

// Highlight elements with class mark

$(".mark").css("background", "yellow");

});

</script>

</head>

<body>

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

<p class="mark">This is another paragraph.</p>

<p>This is one more paragraph.</p>

</body>

</html>

## Selecting Elements by Name

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>jQuery Select Element by Name</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

// Highlight paragraph elements

$("p").css("background", "yellow");

});

</script>

</head>

<body>

<h1>This is heading</h1>

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

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

<div>This is another block of text.</div>

</body>

</html>

## Selecting Elements by Attribute

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>jQuery Select Element by Attribute</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

// Highlight paragraph elements

$('input[type="text"]').css("background", "yellow");

});

</script>

</head>

<body>

<form>

<label>Name: <input type="text"></label>

<label>Password: <input type="password"></label>

<input type="submit" value="Sign In">

</form>

</body>

</html>

## Selecting Elements by Compound CSS Selector

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>jQuery Select Element by Compound Selector</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

// Highlight only paragraph elements with class mark

$("p.mark").css("background", "yellow");

// Highlight only span elements inside the element with ID mark

$("#mark span").css("background", "yellow");

// Highlight li elements inside the ul elements

$("ul li").css("background", "yellow");

// Highlight li elements only inside the ul element with id mark

$("ul#mark li").css("background", "red");

// Highlight li elements inside all the ul element with class mark

$("ul.mark li").css("background", "green");

// Highlight all anchor elements with target blank

$('a[target="\_blank"]').css("background", "yellow");

});

</script>

</head>

<body>

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

<p class="mark">This is another paragraph.</p>

<p>This is one more paragraph.</p>

<ul>

<li>List item one</li>

<li>List item two</li>

<li>List item three</li>

</ul>

<ul id="mark">

<li>List item one</li>

<li>List <span>item two</span></li>

<li>List item three</li>

</ul>

<ul class="mark">

<li>List item one</li>

<li>List item two</li>

<li>List item three</li>

</ul>

<p>Go to <a href="https://www.tutorialrepublic.com/" target="\_blank">Home page</a></p>

</body>

</html>

## jQuery Custom Selector

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>jQuery Custom Selector</title>

<style type="text/css">

/\* Some custom style \*/

\*{

padding: 5px;

}

</style>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

// Highlight table rows appearing at odd places

$("tr:odd").css("background", "yellow");

// Highlight table rows appearing at even places

$("tr:even").css("background", "orange");

// Highlight first paragraph element

$("p:first").css("background", "red");

// Highlight last paragraph element

$("p:last").css("background", "green");

// Highlight all input elements with type text inside a form

$("form :text").css("background", "purple");

// Highlight all input elements with type password inside a form

$("form :password").css("background", "blue");

// Highlight all input elements with type submit inside a form

$("form :submit").css("background", "violet");

});

</script>

</head>

<body>

<table border="1">

<thead>

<tr>

<th>No.</th>

<th>Name</th>

<th>Email</th>

</tr>

</thead>

<tbody>

<tr>

<td>1</td>

<td>John Carter</td>

<td>johncarter@mail.com</td>

</tr>

<tr>

<td>2</td>

<td>Peter Parker</td>

<td>peterparker@mail.com</td>

</tr>

<tr>

<td>3</td>

<td>John Rambo</td>

<td>johnrambo@mail.com</td>

</tr>

</tbody>

</table>

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

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

<p>This is one more paragraph.</p>

<form>

<label>Name: <input type="text"></label>

<label>Password: <input type="password"></label>

<input type="submit" value="Sign In">

</form>

</body>

</html>

# jQuery Events

## What are Events

Events are often triggered by the user's interaction with the web page, such as when a link or button is clicked, text is entered into an input box or textarea, selection is made in a select box, key is pressed on the keyboard, the mouse pointer is moved etc. In some cases, the Browser itself can trigger the events, such as the page load and unload events.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Executing a Function when Document is Ready in jQuery</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

// Code to be executed

alert("Hello World!");

});

</script>

</head>

<body>

<!--Contents will be inserted here-->

</body>

</html>

## Mouse Events

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Executing a Function on Click Event in jQuery</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<style type="text/css">

p{

padding: 20px;

font: 20px sans-serif;

background: khaki;

}

</style>

<script type="text/javascript">

$(document).ready(function(){

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

$(this).slideUp();

});

});

</script>

</head>

<body>

<p>Click on me and I'll disappear.</p>

<p>Click on me and I'll disappear.</p>

<p>Click on me and I'll disappear.</p>

</body>

</html>

## hover() Method

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Executing a Function on Hover Event in jQuery</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<style type="text/css">

p{

padding: 20px;

font: 20px sans-serif;

background: #f2f2f2;

}

p.highlight{

background: yellow;

}

</style>

<script type="text/javascript">

$(document).ready(function(){

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

$(this).addClass("highlight");

}, function(){

$(this).removeClass("highlight");

});

});

</script>

</head>

<body>

<p>Place mouse pointer on me.</p>

<p>Place mouse pointer on me.</p>

<p>Place mouse pointer on me.</p>

</body>

</html>

## submit() Method

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Executing a Function on Form Submit Event in jQuery</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<style type="text/css">

.error{

color: red;

}

</style>

<script type="text/javascript">

$(document).ready(function(){

$("form").submit(function(event){

var regex = /^[a-zA-Z]+$/;

var currentValue = $("#firstName").val();

if(regex.test(currentValue) == false){

$("#result").html('<p class="error">Not valid!</p>').show().fadeOut(1000);

// Preventing form submission

event.preventDefault();

}

});

});

</script>

</head>

<body>

<p><strong>Note:</strong> If try to submit any invalid value. It will produce an error.</p>

<form action="/examples/html/action.php" method="post" id="users">

<label for="firstName">First Name:</label>

<input type="text" name="first-name" id="firstName">

<input type="submit" value="Submit">

<div id="result"></div>

</form>

</body>

</html>

## ready() Method

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Executing a Function on Ready Event in jQuery</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

$("p").text("The DOM is now loaded and can be manipulated.");

});

</script>

</head>

<body>

<p>Not loaded yet.</p>

</body>

</html>

## jQuery show() and hide() Methods

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Example of jQuery Show Hide Effects</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<style type="text/css">

p{

padding: 15px;

background: #F0E68C;

}

</style>

<script type="text/javascript">

$(document).ready(function(){

// Hide displayed paragraphs

$(".hide-btn").click(function(){

$("p").hide();

});

// Show hidden paragraphs

$(".show-btn").click(function(){

$("p").show();

});

});

</script>

</head>

<body>

<button type="button" class="hide-btn">Hide Paragraphs</button>

<button type="button" class="show-btn">Show Paragraphs</button>

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

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

</body>

</html>

Code:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Example of jQuery Animated Show Hide Effects</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<style type="text/css">

p{

padding: 15px;

background: #F0E68C;

}

</style>

<script type="text/javascript">

$(document).ready(function(){

// Hide displayed paragraphs with different speeds

$(".hide-btn").click(function(){

$("p.normal").hide();

$("p.fast").hide("fast");

$("p.slow").hide("slow");

$("p.very-fast").hide(50);

$("p.very-slow").hide(2000);

});

// Show hidden paragraphs with different speeds

$(".show-btn").click(function(){

$("p.normal").show();

$("p.fast").show("fast");

$("p.slow").show("slow");

$("p.very-fast").show(50);

$("p.very-slow").show(2000);

});

});

</script>

</head>

<body>

<button type="button" class="hide-btn">Hide Paragraphs</button>

<button type="button" class="show-btn">Show Paragraphs</button>

<p class="very-fast">This paragraph will show/hide with very fast speed.</p>

<p class="normal">This paragraph will show/hide with default speed.</p>

<p class="fast">This paragraph will show/hide with fast speed.</p>

<p class="slow">This paragraph will show/hide with slow speed.</p>

<p class="very-slow">This paragraph will show/hide with very slow speed.</p>

</body>

</html>

## jQuery toggle() Method

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Example of jQuery Toggle Effect</title>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<style type="text/css">

p{

padding: 15px;

background: #F0E68C;

}

</style>

<script type="text/javascript">

$(document).ready(function(){

// Toggles paragraphs display

$(".toggle-btn").click(function(){

$("p").toggle();

});

});

</script>

</head>

<body>

<button type="button" class="toggle-btn">Toggle Paragraphs</button>

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

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

</body>

</html>