

## What is jQuery ?

jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, animating, event handling, and Ajax interactions for rapid web development. jQuery is designed to change the way that you write JavaScript. jQuery is build library for javascript no need to write your own functions or script jQuery all ready done for you

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## How you will use jQuery?

Download jQuery library(.js file) from any of the jQuery site and just linked with the html pages like all other javascript file

Example :

```
<script src="jQuery.js" language="javascript" type="text/javascript">
```

---

## what the use of \$ symbol in jQuery

\$ Symbol is just replacement of jQuery means at the place of \$ you may use jQuery hence \$ symbol is used for indication that this line used for jQuery

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## How do you select an item using css class or ID and get the value by use of jQuery

If an element of html like <div> , <p> or any tag have ID MyId and class used MyClass then we select the element by below jQuery code

\$('#MyId') for ID and for classs \$('MyClass') and for value

var myValue = \$('#MyId').val(); // get the value in var Myvalue by id

Or for set the value in selected item

\$('#MyId').val("print me"); // set the value of a form input

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## How to get the server response from an AJAX request using jQuery?

When invoking functions that have asynchronous behavior We must provide a callback function to capture the desired result. This is especially important with AJAX in the browser because when a remote request is made, it is indeterminate when the response will be received.

Below an example of making an AJAX call and alerting the response (or error):

```
$.ajax({  
  url: 'pedsEmpRecords.php',  
  success: function(response) {  
    alert(response);  
  },  
  error: function(xhr) {  
    alert('Error! Status = ' + xhr.status);  
  }  
});
```

---

### How do you update ajax response with id “results”

```
function updateStatus() {  
$.ajax({  
url: 'pcdsEmpRecords.php',  
success: function(response) {  
// update div id Results  
$('#results').html(response);  
}  
});  
}
```

---

### How do You disable or enable a form element?

Set the 'disabled' attribute to true or false:

```
// Disable #pcds  
$('#pcds').attr('disabled', true);  
// Enable #pcds  
$('#pcds').attr('disabled', false);  
Add or remove the 'disabled' attribute:  
// Disable #pcds  
$("#pcds").attr('disabled', 'disabled');  
// Enable #x  
$("#pcds").removeAttr('disabled');
```

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### How do you check or uncheck a checkbox input or radio button?

There are two ways to check or uncheck a checkbox or radio button.

Set the 'checked' attribute to true or false.

```
// Check #pcds  
$('#pcds').attr('checked', true);  
// Uncheck #pcds  
$('#pcds').attr('checked', false);  
Add or remove the 'checked' attribute:  
// Check #pcds  
$("#pcds").attr('checked', 'checked');  
// Uncheck #pcds  
$("#pcds").removeAttr('checked');
```

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### How do you get the text value of a selected option?

Select elements typically have two values that you want to access. First there's the value to be sent to the server, which is easy:

```
$("#pcdsselect").val();  
// => 1
```

The second is the text value of the select. For example, using the following select box:

Mr  
Mrs  
Ms  
DrProf

If you wanted to get the string "Mr" if the first option was selected (instead of just "1"), you would do that in the following way:

```
$("#mpcdsselect option:selected").text();  
// => "Mr"
```

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### What does dollar Sign (\$) means in JQuery?

Dollar Sign is nothing but it's an alias for JQuery. Take a look at below jQuery code

```
$(document).ready(function(){  
  
});
```

Over here \$ sign can be replaced with "jQuery " keyword.

```
jQuery(document).ready(function(){  
  
});
```

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### How is body onload() function is different from document.ready() function used in jQuery?

Document.ready() function is different from body onload() function because off 2 reasons.

1. We can have more than one document.ready() function in a page where we can have only one onload function.
  2. Document.ready() function is called as soon as DOM is loaded where body.onload() function is called when everything gets loaded on the page that includes DOM, images and all associated resources of the page.
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### What are the steps you need to follow to use jQuery in ASP.Net project?

It's really simple. One just need to add reference of javascript file(.js). Go to JQuery.com and download the latest version of jQuery. When download is completed, there is a "jQuery-1.3.2.js" in the folder. Include this file

```
<script src="_scripts/jquery-1.3.2.js" type="text/javascript"></script>
```

and you good to go now for JQuery.

**Note :** 1.3.2 denotes the library version.. It can be vary depending upon the version of JQuery you download.

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### What is JQuery UI?

JQuery UI is a library which is built on top of JQuery library. JQuery UI comes with cool widgets, effects and interaction mechanism.

See below page on this site. Date Picker control used in this page to select date is an example of JQuery UI.

### What are features of JQuery or what can be done using JQuery?

Features of JQuery

1. One can easily provide effects and can do animations.
  2. Applying / Changing CSS.
  3. Cool plugins.
  4. Ajax support
  5. DOM selection events
  6. Event Handling
- 

### Name some of the methods of JQuery used to provide effects?

Some of the common methods are :

1. Show()
  2. Hide()
  3. Toggle()
  4. FadeIn()
  5. FadeOut()
- 

### JQuery is replacement of Java Script?

No

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### What are the different type of selectors in JQuery?

There are 3 types of selectors in JQuery

1. CSS Selector
  2. XPath Selector
  3. Custom Selector
- 

### What are the advantages of JQuery ?

There are many advantages with JQuery. Some of them are :

- It is more like a JavaScript enhancement so there is no overhead in learning a new syntax.
  - It has the ability to keep the code simple, readable, clear and reusable.
  - It would eradicate the requirement for writing complex loops and DOM scripting library calls.
- 

### How can you select all elements in a page using jQuery?

To select all elements in a page, we can use all selectors, for that we need to use \*(asterisk symbol).

```
<script language="javascript" type="text/javascript">  
  
    $("").css("border", "2px dotted red");  
  
</script>
```

The above code will select all elements of the web page and apply border width as 2 pixel, style as dotted and color as red.

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## Why jQuery?

jQuery is very compact and well written JavaScript code that increases the productivity of the developer by enabling them to achieve critical UI functionality by writing very less amount of code.

It helps to

- # Improve the performance of the application
- # Develop most browser compatible web page
- # Implement UI related critical functionality without writing hundreds of lines of codes
- # Fast
- # Extensible – jQuery can be extended to implement customized behavior

Other advantages of jQuery are

- # No need to learn fresh new syntax's to use jQuery, knowing simple JavaScript syntax is enough
  - # Simple and Cleaner code, no need to write several lines of codes to achieve complex functionality.
- 

## Where to download jQuery from?

jQuery javascript file can be downloaded from jQuery Official website

<http://www.jquery.com/>

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## Do I need to refer jQuery file both in Master page/base page/template page and content page?

No, master page/base page/ template page basically helps to create consistent layout for the page in the application. In case you have referred the jQuery file in master page/base page/ template page that cause rendering the file in the browser, you do not need to refer jQuery file the content page again.

In summary, there should not be more than one <script> tag with jQuery file reference in the source code of the rendered web page in the browser.

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## What is the difference between jQuery-x.x.x.js and jQuery.x.x.x-min.js

In terms of functionality, there is no difference between the jQuery-x.x.x.js and jQuery.x.x.x-min.js (also called minified version). However this can play a vital role in the performance of the web page.

How it affects the performance?

jQuery-1.4.4.js file size is 178 KB as against its minified version jQuery-1.4.4-min.js that is only 76.7 KB in size. So when your page loads in the client's browser if you are not using minified version, it loads 178 KB file that takes more time to load than 76.7 KB.

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### Which version of jQuery file should be used?

In most of the recent releases so far, the core functionality of jQuery remains same however some more cool and better features are added. Ideally you should use the latest jQuery files available on the jQuery.com website. By doing this you ensure that your earlier functionality will still work and you can use new features available as part of the new release.

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### What is CDN?

CDN Stands for Content Distribution Network or also called Content Delivery Network is a group of computers placed at various points connected with network containing copies of data files to maximize bandwidth in accessing the data. In CDN a client access a copy of data nearer to the client location rather than all clients accessing from the one particular server. This helps to achieve better performance of data retrieval by client.

#### **There are two leading CDNs available that hosts jQuery files.**

Microsoft - To load jQuery from Microsoft AJAX CDN

jQuery file can be loaded from Microsoft AJAX CDN. For more details, go to <http://www.asp.net/ajaxlibrary/cdn.ashx>. You will need to keep following tags in your page.

```
<script type="text/javascript" language="Javascript" src="http://ajax.aspnetcdn.com/ajax/jquery/jquery-1.4.1.min.js"></script>
```

#### **Google - To load jQuery from Google Libraries API**

jQuery file can be loaded from Google CDN for more details, go to <http://code.google.com/apis/libraries/devguide.html>. You will need to keep following tag in your page.

```
<script type="text/javascript" language="Javascript" src="https://ajax.googleapis.com/ajax/libs/jquery/1.4.4/jquery.min.js"></script>
```

---

### Why to load jQuery file from CDN?

You may ask that if we can load the jQuery file from our own server why to load it from the CDNs. The answer is logical and very simple. The browser behavior is that whenever it loads any webpage, it keeps related files (eg. Javascript file, CSS file and Images) used for that page into its cache (also called history). When next time the user browses any web page, browser loads only those files that are new or modified and is not available in the browser cache or history. In this way, browser improves its performance and loads the page.

The possibility is that if more and more websites are using CDNs, the user might have already browsed some other web pages that is using CDNs jQuery file and that file may have into browser cache; so when user browse your page and you are also using CDNs file, the older cached version of jQuery file will be used. In this way your page will load faster as browser will not have to load the jQuery file for your page again.

The benefit

1. Faster page load as jQuery file need not to be downloaded
2. Saves your bandwidth as jQuery file is not loaded from your server
3. Scalable - generally CDNs place these files on the servers located at different geographical locations of the world so that they load faster so irrespective of from where your user is browsing your page, your application runs well.

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### What if the latest jQuery version is available and I am still referring older version of jQuery file from CDNs?

Do not worry about it, it's a general promise made by CDNs that they will remain hosting the older version of the files on the same location where they had initially released; so even if newer version of the files are released, the older version remains there on the CDNs and your web page still works.

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### How to load local jQuery file in case CDN is not available?

Sometimes, it may happen that the CDN you have used to load the jQuery file is not available (it rarely happens, however anything is possible, isn't it?); in that case you should load your local jQuery file that is available on your server so that all jQuery related functionality still work on your page.

Write following lines of code

```
<!-- START - jQuery Reference -->

<script type="text/javascript" language="Javascript" src="http://ajax.aspnetcdn.com/ajax/jquery/jquery-1.4.1.min.js "></script>

<script type='text/javascript'>

if (typeof jQuery == 'undefined') {

document.write(unescape("%3Cscript src='/Script/jquery-1.4.1.min.js' type='text/javascript' %3E%3C/script%3E"));

}]]&gt;

&lt;/script&gt;

&lt;!-- END - jQuery Reference --&gt;</pre></div><div data-bbox="57 557 935 607" data-label="Text"><p>Replace bolded path with your own jQuery file path on the server. In the above code, first line tries to load the jQuery file from CDN, if browser could load the file successfully, "jQuery" variable will not be undefined and next script will not run otherwise next script will run that will write the script tag to load the jQuery file from your server.</p></div><div data-bbox="57 653 233 667" data-label="Section-Header"><hr/><h3>How to execute jQuery code?</h3></div><div data-bbox="57 696 363 711" data-label="Text"><p>1. As and when page loads, execute the jQuery code</p></div><div data-bbox="60 722 394 838" data-label="Text"><pre>&lt;script language="javascript" type="text/javascript"&gt;

$(function () {

$("#div1").css("border", "2px solid green");

});

&lt;/script&gt;</pre></div><div data-bbox="57 866 83 880" data-label="Text"><p>OR</p></div><div data-bbox="67 892 401 932" data-label="Text"><pre>&lt;script language="javascript" type="text/javascript"&gt;

$("#div1").css("border", "2px solid green");</pre></div>
```

</script>

The benefit of executing jQuery code in this way is that it doesn't wait the whole page to load completely, so in case you want user to see the effects as soon as the corresponding elements are loaded, you can use this.

However the disadvantage is that if the element on which jQuery has to execute has not loaded then it will error out or you will not get desired result; so while using this way of executing jQuery code, you will have to make sure that the element on which you want to work with jQuery is loaded first (you can place your jQuery code right after your HTML element).

2. Execute jQuery only when the complete DOM objects (the complete page has been loaded). You will have to wrap your code in .ready function.

```
<script language="javascript" type="text/javascript">

    $(document).ready(function () {

        $("#div1").css("border", "2px solid green");

    });

</script>
```

This is the better and safer way to execute jQuery. This makes sure that jQuery code will execute only if complete page has been loaded in the browser so you are rest assured that user will not see any undesired behavior on the page.

As a developer, the decision of where and how to write jQuery code lies on you. I prefer to use 2nd method as it ensures that my complete page is loaded in the browser and I am ready to play with any element available on the page.

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## jQuery Core

jQuery accepts a string enclosed with double quote (") that can contain a CSS selector which is used to match a set of elements on the web page.

jQuery code can start with either "jQuery" word or a "\$" (dollar symbol). Take a look at below code snippet

```
<script language="javascript" type="text/javascript">

    $(function () {

        jQuery("#div1").css("border", "2px solid red");

    });

</script>
```

OR

```
<script language="javascript" type="text/javascript">

    $(function () {

        $("#div1").css("border", "2px solid green");

    });

</script>
```

Both above code snippets are functionally same and do the same thing. So you can either use jQuery or \$ when you are writing jQuery code.



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## How to give alert message in jQuery on a Button Click ?

First, include jQuery in your application.

Drop a textbox in your .aspx page:-

```
<input id="inputField" type="text" size="12"/>
```

include a button also:-

```
<asp:Button ID="Button1" runat="server" Text="get"/>
```

Now, here's the script:-

```
<script type="text/javascript">
$(document).ready(function () {
$('#Button1').click(function () {
alert($('#inputField').attr("value"));
});
});
</script>
```

On the click of the button, an alert will be given containing the text in the text box.

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## What are Selectors in jQuery mean ?

Generally in HTML, if we need to work with any control on a web page we need to find the control. For that we use document.getElementById or document.getElementsByName. But in jquery we do it using Selectors.

Using this selectors we can select all the controls as well using a symbol (\*)

A sample code snippet can be of this form

```
<script language="javascript" type="text/javascript">
$("*").css("border", "10px red");
</script>
```

This will make all the borders in the web page with a width of 10 pixel and color as red.

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## Is it good to load jquery from CDN(Content delivery network) ?

Yes, it is always good to load your jquery from content delivery network. It provides some benefits like :-

- (1) Caching - It means that if any previously visited site by user is using jQuery from Google CDN then the cached version will be used. It will not be downloaded again.
- (2) Reduces load - It reduces the load on your web server as it downloads from Google server's.

Example :-

```
<script type="text/javascript"
    src="http://ajax.googleapis.com/ajax/libs/jquery/1.7.1/jquery.min.js">
</script>
```

---

[Do we need to add the JQuery file both at the Master page and Content page as well?](#)

No, if the JQuery file has been added to the master page then we can access the content page directly without adding any reference to it.

This can be done using this simple example

```
<script type="text/javascript" src="jQuery-1.4.1-min.js"></script>
```

---

[What is the advantage of using the minified version of JQuery rather than using the conventional one?](#)

The advantage of using a minified version of JQuery file is Efficiency of the web page increases.

The normal version jQuery-x.x.x.js has a file size of 178KB

but the minified version jQuery.x.x.x-min.js has 76.7 KB.

The reduction in size makes the page to load more faster than you use a conventional jQuery file with 178KB

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[What is CDN and how jQuery is related to it?](#)

CDN - It stands for Content Distribution Network or Content Delivery Network.

Generally, a group of systems at various places connected to transfer data files between them to increase its bandwidth while accessing data. The typical architecture is designed in such a way that a client access a file copy from its nearest client rather than accessing it from a centralized server.

So we can load this jQuery file from that CDN so that the efficiency of all the clients working under that network will be increased.

Example :

We can load jQuery from Google libraries API

```
<script type="text/javascript" language="Javascript" src="https://ajax.googleapis.com/ajax/libs/jquery/1.4.4/jquery.min.js"></script>
```

---

[Can we select an element having a specific class in jQuery ?](#)

Yes, we can select an element with a specific class, we use the class selector. The class name must contain the prefix as "." (dot).

```
<script language="javascript" type="text/javascript">

    $(".class1").css("border", "2px solid red");

</script>
```

Above code will select all the elements of the webpage containing the class as "class1" and apply the css style border width as 2 Pixel, style as solid and color as red.

---

### What is the use of Delegate() Method in jQuery?

The delegate() method can be used in two ways.

1) If you have a parent element, and you want to attach an event to each one of its child elements, this delegate() method is used.

Ex:Un-ordered List

Instead of attaching an event to each <li> element, you can attach a single event to <ul> element.

Example:

```
$(".ul").delegate("li", "click", function(){

$(this).hide();

});
```

2) When an element is not available on the current page, this method is used.

.live() method is also used for the same purpose but, delegate() method is a bit faster.

Example:

```
$(".ul").delegate("li", "click", function(){

$(this).hide();

});
```

This will hide any list items that are not currently available on the page. They may be loaded via an Ajax request and then append to it.

Using .bind() or .click() methods, you would have to manually attach events to these new list items once they are added.

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### How to get field values dynamically through ID using jQuery

Let us consider a scenario, There are n number of fields with different ids. We need to get the value of all the fields dynamically without specifying id explicitly.

For Example, let's have following html tags in our html form:

```
<input type="text" id="id_1" value="rosary"/><br/>
<input type="text" id="id_2" value="prabhu"/><br/>
<input type="text" id="id_3" value="stephen"/><br/>
<input type="text" id="id_4" value="ilango"/><br/>
<input type="text" id="id_5" value="sathya"/><br/>
```

We need to get the values of each text box fields dynamically without specifying each ids explicitly.

Following is the code snippet to achieve the above task:

```
for (var i=1; i<=5; i++) {  
var test = $("input[id='id_" + i + "']").val();  
alert (test);  
}
```

You can also achieve the same using following code snippet

```
$("input[type='text']").each(function(){  
var test = $("input[id='"+this.id+"']").val();  
});
```

---