

## JQUERY

### 1. What is jQuery ?

jQuery is simply a DOM manipulation utility belt.

### 2. What is chaining in jQuery ?

jQuery chaining allows us to run multiple jQuery commands, one after the other, on the same element.

### 3. What is hide( ), show( ) and toggle( ) methods in jQuery ?

hide( ) - is used to hide an element

`$(selector).hide(speed,callback)`

speed - is optional. It specifies the duration of the effect. It can have any values such as "slow", "fast", or "milliseconds".

callback - is optional. It specifies a function to be executed after the sliding completes.

show( ) - is used to show an element

`$(selector).show(speed,callback)`

toggle( ) - is used to toggle between hide( ) and show( ) methods.

`$(selector).toggle(speed,callback)`

### 4. What are jQuery methods for Fading ?

jQuery has four methods for Fading. They are:

(i) fadeIn( ) - is used to fade in a hidden element.

`$(selector).fadeIn(speed,callback)`

speed - is optional. It specifies the duration of the effect. It can have any values such as "slow", "fast", or "milliseconds".

callback - is optional. It specifies a function to be executed after the sliding completes.

(ii) fadeOut( ) - is used to fade out a visible element.

`$(selector).fadeOut(speed,callback)`

(iii) fadeToggle( ) - is used to toggle between fadeIn( ) and fadeOut( ) methods.

`$(selector).fadeToggle(speed,callback)`

(iv) fadeTo( ) - allows fading to a given opacity ( value between 0 and 1)

`$(selector).fadeTo(speed,opacity,callback)`

### 5. What are jQuery methods for Sliding ?

jQuery has three methods for sliding. They are:

(i) slideDown( ) - is used to slide down an element

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

speed - is optional. It specifies the duration of the effect. It can have any values such as "slow", "fast", or "milliseconds".

callback - is optional. It specifies a function to be executed after the sliding completes.

(ii) slideUp( ) - is used to slide up an element

`$(selector).slideUp(speed,callback)`

(iii) slideToggle( ) - is used to toggle between slideDown( ) and slideUp( ) methods.

`$(selector).slideToggle(speed,callback)`

### 6. What is animate( ) method in jQuery ?

animate( ) method is used to create custom animations.

`$(selector).animate( {params}, speed, callback )`

params - specifies the CSS properties to be animated

speed - is optional.specifies the duration of the effect.It can have any values such as “slow”, "fast", or "milliseconds".

callback - is optional.callback is a function to be executed after the animation completes.

7.What is stop( ) method in jQuery ?

stop( ) method is used to stop an animation or effect before it is finished.

stop( ) method works for all jQuery functions including sliding,fading,and custom animations.

\$(selector).stop(stopAll,goToEnd)

stopAll - is optional.specifies whether the animation queue should be cleared or not.By default stopAll is set to false,which means that only the active animation will be stopped,allowing any queued animations to be performed afterwards.

goToEnd - is optional.specifies whether or not to complete the current animation immediately.By default gotoEnd is set to false.

So,by default the stop( ) method kills the current animation being performed on the selected element.

8.What is a Callback function in jQuery ?

Javascript statements are executed line by line.However,with effects,the next line of code can be run even though "the effect" isn't finished.This can create errors.To prevent this,we can create a Callback function.A Callback function is executed after the current effect is finished.

syntax: \$(selector).hide(speed,callback)

9.What is Method chaining in jQuery ?

Method chaining allows you to run multiple jQuery methods on the same element within a single statement.

Method chaining results in clean and concise code and it also results in single search over DOM,hence the performance is better.

10.What are jQuery methods for setting the content ?

jQuery has three methods for setting the content.They are:

text( ) - sets or returns the text content of selected element

html( ) - sets or returns the content of selected elements

val( ) - sets or returns the value of form fields

11.What is attr( ) method ?

attr( ) method is used to set or return attributes and values of the selected elements.

\$(selector).attr(attribute) - returns the value of an attribute

\$(selector).attr(attribute,value) - sets the value of an attribute

\$(selector).attr( {attribute : value, attribute : value,...} ) - sets the values of multiple attributes

\$(selector).attr(attribute,function(index,currentValue) ) - sets the value of an attribute using a function.

index - specifies the index position of the element in a set.

currentValue - specifies the current value of an attribute of selected elements.

12.What are jQuery methods for adding the content ?

jQuery has four methods for adding the content.They are:

append( ) - inserts content at the end of the selected elements

prepend( ) - inserts content at the beginning of the selected elements

after( ) - inserts content after the selected elements

before( ) - inserts content before the selected elements

13.What are jQuery methods for removing the elements ?

jQuery has two methods for removing the elements.They are:

remove( ) - removes the selected element( and its child elements)

`empty()` - removes the child elements from the selected element.

14. What are jQuery CSS classes ?

jQuery has four methods for CSS manipulation. They are:

`addClass()` - adds one or more classes to the selected elements

`removeClass()` - removes one or more classes from the selected elements

`toggleClass()` - toggles between adding or removing classes from the selected elements

`css()` - sets or returns the style attribute

15. What are jQuery Dimension methods ?

jQuery has six methods for working with the dimensions. They are:

`width()` - sets or returns the width of an element (excludes padding, border and margin)

`height()` - sets or returns the height of an element (excludes padding, border and margin)

`innerWidth()` - returns the width of an element (includes padding)

`innerHeight()` - returns the height of an element (includes padding)

`outerWidth()` - returns the width of an element (includes padding and border)

`outerHeight()` - returns the height of an element (includes padding and border)

16. What is Traversing ?

jQuery is used for traversing. jQuery provides a variety of methods that allows us to traverse the DOM. Traversing is used to find HTML elements based on their relation to other elements. Start with one selection and move through that selection until you reach the elements you desire.

17. What are the methods used for Traversing up the DOM Tree in jQuery ?

`parent()` - returns the direct parent element of the selected element

`parents()` - returns all ancestor elements of the selected elements

`parentsUntil()` - returns all ancestor elements between two given arguments.

18. What are the methods used for Traversing down the DOM Tree in jQuery ?

`children()` - returns all direct children of the selected element

`find()` - returns descendant elements of the selected element, all the way down to the last descendant.

19. What are the methods used for Traversing sideways in the DOM Tree in jQuery ?

`siblings()` - returns all sibling elements of the selected element

`next()` - returns the next sibling element of the selected element

`nextAll()` - returns all next sibling elements of the selected element.

`nextUnit()` - returns all next sibling elements between two given arguments

`prev()`, `prevAll()`, `prevUnit()` - works just opposite to `next()`, `nextAll()`, `nextUnit()`

20. What are the methods used for filtering in jQuery ?

`first()` - returns the first element of the selected elements

`last()` - returns the last element of the selected elements

`eq()` - returns an element with a specific index number of the selected elements.

`filter()` - allows you to specify a criteria. The elements that don't match the criteria are removed from the selection, and those that match will be returned.

`not()` - returns all elements that don't match the criteria. `not()` is the opposite of `filter()`

21. What is `on()` method in jQuery ?

`on()` method attaches one or more event handlers for the selected elements and child elements.

`on()` method is the new replacement for the `bind()`, `live()` and `delegate()` methods.

on( ) method brings a lot of consistency to the API.

`$(selector).on(event,childSelector,data,function,map)`

event - specifies one or more events to be attached to the selected element.

childSelector - is optional.specifies that the event handler should only be attached to the specified child elements (and not the selector itself,like the deprecated `delegate( )` method)

data - is optional.specifies additional data to pass along to the function.

function - specifies the function to run when the event occurs.

map - specifies an event map ( { event : function, event : function, .....} ) containing one or more events to attach to the elements,and functions to run when the events occur.

22.What is off( ) method in jQuery ?

off( ) method is used to remove event handlers attached with the on( ) method.

off( ) method is the new replacement for the `unbind( )`, `die( )` and `undelegate( )` methods.

off( ) method brings a lot of consistency to the API.

`$(selector).off(event,selector,function (evenObj), map )`

event - specifies one or more events to be removed from the selected element.

selector - is optional.A selector which should match the one originally passed to the on( ) method when attaching event handlers.

function(evenObj) - is optional.specifies the function to run when the event occurs.

map - specifies an event map ( { event : function, event : function, .....} ) containing one or more events to attach to the elements,and functions to run when the events occur.

23.What is one( ) method in jQuery ?

one( ) method attaches one or more event handlers for the selected elements,and specifies a function to run when the event occurs.

Incase of one( ) method,the event handler function runs only once for each element.

`$(selector).one(event,data,function)`

event - specifies one or more events to be attached to the selected element.

data - is optional.specifies additional data to pass along to the function.

function - specifies the function to run when the event occurs.

24.What is load( ) method in jQuery ?

The load( ) method loads data from a server and puts the returned data into the selected element.

The syntax is :

`$(selector).load(URL,data,callback)`

data - is an optional parameter,which specifies a set of querystring key/value pairs to send along with the request.

callback - is an optional parameter,callback parameter is the name of a function to be executed after the load( ) method is completed,that is,the callback parameter specifies a callback function to run when the load( ) method is completed.The callback function can have different parameters:

responseTxt - contains the resulting content if the call succeeds

statusTxt - contains the status of the call

xhr - contains the XMLHttpRequest object

25.What is get( ) method in jQuery ?

The get( ) method requests data from the server with an HTTP GET request.

`$.get(URL,callback)`

26.What is post( ) method in jQuery ?

The post( ) method requests data from the server using an HTTP POST request.

`$.post(URL,data,callback)`

27.What is noConflict( ) method in jQuery ?

If two different frameworks are using the same shortcut, one of them might stop working.  
The `noConflict()` method releases the hold on `$` shortcut identifier, so that other scripts can use it.

28. What is the difference between `detach()` method and `remove()` method in jQuery ?  
Both `detach()` method and `remove()` method are used to remove the selected element. But, `detach()` method keeps track of the last element detached, so that it can be reattached at a later time.

29. What is an `eq` method in jQuery ?  
The `eq` method returns an element with a specific index number of the selected elements. The index numbers start at 0, so the first element will have the index number 0 (not 1).  
`$(selector).eq(index)`  
index - specifies the index of an element. Index can either be a positive or negative number.

30. What is `each()` function in jQuery ?  
`each()` method specifies a function to run for each matched element. To stop the loop early, return "false".  
`$(selector).each(function (index, element) )`  
index - specifies the index position of the selector  
element - specifies the current element (the "this" selector can also be used)

31. What is the difference between `$(window).width()` and `$(document).width()` ?  
`$(window).width()` - is available before the document loads. It returns the width of the browser  
`$(document).width()` - is available after the document is loaded. It returns the width of the HTML document

32. What is the difference between `jQuery.size()` and `jQuery.length` ?  
`jQuery.size()` and `jQuery.length` both return the number of elements in the jQuery object.  
`jQuery.size()` was deprecated in jQuery version 1.8

33. What is the difference between `onload()` function and `document.ready()` function ?  
or  
What is the difference between Javascript `window.onload` event and jQuery `ready` function ?  
Javascript `window.onload` event not only waits for DOM to be created but also waits until all external resources are fully loaded including heavy images, audios and videos.  
jQuery `ready` function only waits for DOM tree, and doesn't wait for images or external resource loading, that means jQuery `ready` function is faster.  
we can have only one Javascript `window.onload` event in a page.  
we can have jQuery `ready` function multiple times in a page.

34. What is the difference between `$(this)` and `"this keyword"` in jQuery ?  
`$(this)` returns a jQuery object, on which we can call several jQuery methods, such as `text()` to retrieve text, `val()` to retrieve values.  
"this keyword" represents the current DOM element in a context.

35. How can you debug jQuery code ?  
Add the keyword "debugger" to the line from where we want to start the debugging and then run the Visual Studio in Debug mode by pressing F5 or using Debug button.

36. What are jQuery Selectors ?  
jQuery selectors are used to find out DOM elements. The jQuery selectors are  
\* - selects all elements

id - selects one element  
class - selects a group of elements  
element - \$("p") - selects all "p" elements  
id and element selectors are the fastest jQuery selectors.

37. What are jQuery Events ?

- (i) click( ) event
- (ii) dblclick( ) event
- (iii) mouseenter( ) event
- (iv) mouseleave( ) event
- (v) mousedown( ) event
- (vi) mouseup( ) event
- (vii) hover( ) event
- (viii) focus( ) event
- (ix) blur( ) event

38. What is Event delegation ?

Event delegation is the process of using event propagation(bubbling) to handle events at a higher level in the DOM than the element on which the event originated.

Event delegation allows us to attach a single event listener for elements that exist now or in the future.

39. What happens If you return false from a jQuery event handler ?

If you return false from a jQuery event handler, it prevents the default action for that event and stops the event bubbling up through the DOM.

40. Where does jQuery code execute ?

jQuery code executes on client browser

41. What are the jQuery plugins you used ?

jQueryValidator  
Autocomplete  
Growl provider  
Drag and Drop  
JCarousel

42. What is jQuery.ajax( ) ?

jQuery.ajax( ) is used to perform asynchronous HTTP requests.

43. In jQuery, what methods have you used to perform Ajax requests ?

- (i) jQuery.get( url, data, success, datatype ) - To load data from the server using a HTTP GET request
- (ii) jQuerygetJSON( ) - To load JSON-encoded data from the server using a HTTP GET request
- (iii) jQuery.getScript( ) - To load a Javascript file from the server using a HTTP GET request, then execute it
- (iv) jQuery.post( ) - To load data from the server using a HTTP POST request
- (v) .load( ) - To load data from the server and place the returned HTML into the matched element

44. What Global Ajax Event Handlers have you used ?

- (i) .ajaxComplete( ) - To register a handler to be called when Ajax requests complete
- (ii) .ajaxSend( ) - To attach a function to be executed before an Ajax request is sent
- (iii) .ajaxStart( ) - To register a handler to be called when the first Ajax request begins
- (iv) .ajaxStop( ) - To register a handler to be called when all Ajax requests have completed

- (v) `.ajaxError( )` - To register a handler to be called when Ajax requests complete with an error
- (vi) `.ajaxSuccess( )` - To attach a function to be executed whenever an Ajax request completes successfully.