**JQUERY CLASS**

1. **What is jquery, usage, how to use**

jQuery is JavaScript Library come up with a nice motto − Write less, do more.

jQuery is designed to make many JavaScript development tasks much easier.

**Features:**

1. DOM Manipulation : .attr(), .html(), and .val()
2. Event handing : on(), trigger(),live())
3. CSS3 Element selection: like $(“ul li:first-child”)
4. Effects : like $(selector).fadeIn(speed,callback);
5. Animations : $("div").animate({left: '250px'});
6. Ajax Manipulation : jQuery.ajax( url [, settings ] )
7. Lightweight minified Plug-in :
8. Cross browser support

**How to use:**

Include: <script type = "text/javascript" src = "/jquery/jquery-2.1.3.min.js"></script>

**Syntax:**

$(selector).action();

1. **DOM manipulation:**
   * + .***addClass***() 🡪 Adds the specified class(es) to each element in the set of matched elements.
     + .***hasClass***() 🡪 Determine whether any of the matched elements are assigned the given class
     + .***removeClass***() 🡪 Remove a single class, multiple classes, or all classes from each element in the set of matched elements
     + .***toggleClass***() 🡪 Add or remove one or more classes from each element in the set of matched Elements, depending on either the class’s presence or the value of the state argument.
     + .***scrollTop***() 🡪 Get the current vertical position of the scroll bar for the first element in the set of matched elements or set the vertical position of the scroll bar for every matched element.
     + .***val***() 🡪 Get the current value of the first element in the set of matched elements or set the value of every matched element.
     + .***html***() 🡪 html( ) method gets the html contents (innerHTML) of the first matched element.
     + .***replaceWith***() 🡪 You can replace a complete DOM element with the specified HTML or DOM elements.
     + .***empty***() 🡪The empty( ) method remove all child nodes from the set of matched elements
     + .***detach***() 🡪 Remove the set of matched elements from the DOM.
     + .***remove***() 🡪 remove method removes all matched elements from the DOM.
     + .***after***() 🡪 The after() method insert content after each of the matched elements.
     + .***before***() 🡪 before( content ) method inserts content before each of the matched elements.
     + .***append***() 🡪 Append content to the inside of every matched element.
     + .***appendTo***() 🡪 Append all of the matched elements to another, specified, set of elements.
     + .***prepend***() 🡪 Prepend content to the inside of every matched element.
     + .***prependTo***() 🡪 Prepend all of the matched elements to another, specified, set of elements.
     + .***text***() 🡪 Get the combined text contents of all matched elements.
     + .***wrap***(elem) 🡪 Wrap each matched element with the specified element.
     + .***wrapAll***(elem) 🡪 Wrap all the elements in the matched set into a single wrapper element.
     + .***clone***() 🡪 Create a deep copy of the set of matched elements.
     + .***attr***() 🡪 Get the value of an attribute for the first element in the set of matched elements or set one or more attributes for every matched element.
     + .***css***() 🡪 Get the value of a computed style property for the first element in the set of matched elements or set one or more CSS properties for every matched element.
     + .***width***() 🡪 Get the current computed width for the first element in the set of matched elements or set the width of every matched element.
     + .***height***() 🡪 Get the HTML contents of the first element in the set of matched elements or set the HTML contents of every matched element.
     + .***innerHeight***() 🡪 Get the current computed inner height (including padding but not border) for the first element in the set of matched elements or set the inner height of every matched element.
     + .***innerWidth***() 🡪 Get the current computed inner width (including padding but not border) for the first element in the set of matched elements or set the inner width of every matched element.
     + .***insertAfter***() 🡪 Insert every element in the set of matched elements after the target.
     + .***offset***() 🡪 Get the current coordinates of the first element, or set the coordinates of every element, in the set of matched elements, relative to the document.
     + .***position***() 🡪 Get the current coordinates of the first element in the set of matched elements, relative to the offset parent.
     + .***prop***() 🡪 Get the value of a property for the first element in the set of matched elements or set one or more properties for every matched element.
2. **Jquery selectors:**

.className, #ID, ALL HTML TAGS,

**Pseudo selectors:**

http://www.w3schools.com/cssref/css\_selectors.asp

* + - .class, #id
    - element (p),
    - element element 🡪 div p 🡪 Selects all <p> elements inside <div> elements
    - element>element🡪 div > p 🡪Selects all <p> elements where the parent is a <div> element
    - element+element 🡪div + p 🡪 Selects all <p> elements that are placed immediately after <div> elements
    - element1~element2 🡪 p ~ ul 🡪 Selects every <ul> element that are preceded by a <p> element
    - :first-child 🡪 p:first-child 🡪Selects every <p> element that is the first child of its parent
    - :last-child 🡪 p:last-child🡪 Selects every <p> element that is the last child of its parent
    - :nth-child(n) 🡪 p:nth-child(2) 🡪 Selects every <p> element that is the second child of its parent
    - :focus🡪 input:focus 🡪 Selects the input element which has focus
    - :hover🡪a:hover🡪Selects links on mouse over

1. **Events :** 
   * + .**click()** 🡪 Bind an event handler to the “click” JavaScript event, or trigger that event on an element.
     + .**dbclick()** 🡪 Bind an event handler to the “dblclick” JavaScript event, or trigger that event on an element.
     + **.blur()** 🡪 The blur event occurs when the <input> field loses focus
     + **.change()** 🡪 The change event occurs when the value of an element has been changed
     + **.preventDefault()** 🡪 Prevents the default action of the event
     + **.stopPropogation()** 🡪 method stops the bubbling of an event to parent elements, preventing any parent event handlers from being executed.
     + **.focus()** 🡪The focus event occurs when an element gets focus.
     + **.hover()** 🡪 Method specify when the mouse pointer hovers over the selected elements
     + **.mousedown()** 🡪 The mousedown event occurs when the left mouse button is pressed down over the selected element.
     + **.mouseenter()** 🡪 The mouseenter event occurs when the mouse pointer is over (enters) the selected element.
     + **.mouseleave()** 🡪 The mouseleave event occurs when the mouse pointer leaves the selected element.
     + **.mousemove()** 🡪 The mousemove event occurs whenever the mouse pointer moves within the selected element.
     + **.mouseover()** 🡪 The mouseover event occurs when the mouse pointer is over the selected element.
     + **.mouseup()** 🡪 The mouseup event occurs when the left mouse button is released over the selected element.
     + **.off()** 🡪 The off() method is most often used to remove event handlers attached with the [on()](http://www.w3schools.com/jquery/event_on.asp) method.
     + **.on()** 🡪 method attaches one or more event handlers for the selected elements and child elements.
     + **.one()** 🡪 method attaches one or more event handlers for the selected elements, and specifies a function to run when the event occurs.
     + **.ready()** 🡪 The ready event occurs when the DOM (document object model) has been loaded.
     + **.resize()** 🡪 The resize event occurs when the browser window changes size.
     + **.scroll()** 🡪 The scroll event occurs when the user scrolls in the specified element.
     + **.select()** 🡪 The select event occurs when a text is selected (marked) in a text area or a text field.
     + **.submit()** 🡪 The submit event occurs when a form is submitted.
     + **.trigger()** 🡪 The trigger() method triggers the specified event and the default behavior of an event (like form submission) for the selected elements.

1. **Effects:**

fadeIn(), fadeOut(), fadeToggle(), fadeTo()

slideDown(), slideUp(),slideToggle()

1. **Animations:**

The jQuery animate() method is used to create custom animations.

Animate : $(selector).animate({params},speed,callback);

1. **Stop():** Stop the event handlers
2. **Callback:**

A callback function is executed after the current effect is finished.

JavaScript statements are executed line by line. However, with effects, the next line of code can be run even though the effect is not finished. This can create errors.

To prevent this, you can create a callback function.

1. **Chaining:**

Chaining allows us to run multiple jQuery methods (on the same element) within a single statement.

1. **Jquery Get methods:**

.text(), .html(), .val(), .attr()

1. **Set :**

.text(), .html(), .val(), .attr()

1. **Sibilings:** 
   * + The siblings() method returns all sibling elements of the selected element.
     + The next() method returns the next sibling element of the selected element.
     + The nextAll() method returns all next sibling elements of the selected element.
     + The nextUntil() method returns all next sibling elements between two given arguments.
     + The prev(), prevAll() and prevUntil() methods work just like the methods above but with reverse functionality
2. **Traversing :**

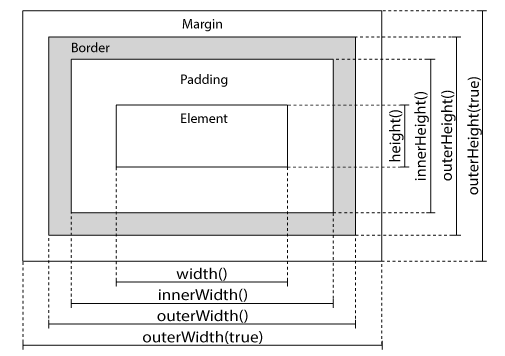
parentsUntil(), patent(), parents(), childern(), find()

1. **Filtering:**

first(), last(), The eq() method returns an element with a specific index number of the selected elements.

1. **Dimensions:**

$(window).width(), $(window).height()



1. **What is AJAX ? Different types of jQuery AJAX methods?**

AJAX = Asynchronous JavaScript and XML. AJAX is art of exchanging the data without reloading the page. With the jQuery AJAX methods, you can request text, HTML, XML, or JSON from a remote server using both HTTP Get and HTTP Post - And you can load the external data directly into the selected HTML elements of your web page!

$.ajax() : Performs asynchronous Ajax request.

$.ajaxPrefilter(): Handing custom Ajax options and modify existing options before each request is sent and before they processed using $.ajax().

$.ajaxStup(): Sets default value for the future Ajax request .

$.get(): Loads the data from the server using http GET request.

$.getJSON(): Loads JSON-encoded data from the server using http GET request.

$.getScript(): Loads javascript from server using http GET request.

[$.post()](http://www.w3schools.com/jquery/ajax_post.asp): Loads data from a server using an AJAX HTTP POST request.

ajaxComplete(): Specify a function when ajax request is complete.

ajaxError(): Specifies a function to run when the AJAX request completes with an error.

ajaxSend(): Specifies a function to run before the AJAX request is sent.

ajaxStart(): Specifies a function to run when the first AJAX request begins.

ajaxStop(): Specifies a function to run when all AJAX requests have completed.

ajaxSuccess(): Specifies a function to run when an AJAX request completes successfully.

load(): Loads data from a server and puts the returned data into the selected element.

**JQUERY UI:**

1. **Draggable:**

Enable draggable functionality on any DOM element. Move the draggable object by clicking on it with the mouse and dragging it anywhere within the viewport.

$("#draggable").draggable();

1. **Droppable:**

Enable any DOM element to be droppable, a target for draggable elements.

<script>

$( function() {

$("#draggable").draggable();

$("#droppable").droppable({

drop: function( event, ui ) {

$( this )

.addClass( "ui-state-highlight" )

.find( "p" )

.html( "Dropped!" );

}

});

} );

</script>

1. **Resizable:**

Enable any DOM element to be resizable. With the cursor grab the right or bottom border and drag to the desired width or height.

$( "#resizable" ).resizable();

1. **Selectable**

Enable a DOM element (or group of elements) to be selectable. Draw a box with your cursor to select items. Hold down the Ctrl key to make multiple non-adjacent selections. $("#selectable").selectable();

1. **Sortable**

Enable a group of DOM elements to be sortable. Click on and drag an element to a new spot within the list, and the other items will adjust to fit. By default, sortable items share draggable properties.

$( "#sortable" ).sortable();

$( "#sortable" ).disableSelection();

1. **Accordion:**

Click headers to expand/collapse content that is broken into logical sections, much like tabs. Optionally, toggle sections open/closed on mouseover.

$( "#accordion" ).accordion();

1. **Checkboxradio**

$( "input" ).checkboxradio();

1. **Datepicker:**

$( "#datepicker" ).datepicker();

1. **Dialog**

$( "#dialog" ).dialog();

1. **Menu**

$( "#menu" ).menu();

1. **Progressbar**

$( "#progressbar" ).progressbar({

value: 37

});

1. **Select Menu**

$( "#speed" ).selectmenu();

1. **Slider:**

$( "#slider" ).slider();

1. **Tabs**

$( "#tabs" ).tabs();

1. **Tooltip**

$( document ).tooltip()