

jQuery

jQuery is a javascript library which is used to manipulate the DOM. It is lightweight, fast and has lots of features and it has APIs for event handling, animation, DOM manipulation, ajax etc.

Features of jQuery:

1. jQuery is a small, fast and lightweight JavaScript library.
2. It is platform independent.
3. It simplifies Ajax and DOM manipulation.
4. It is very fast and extensible.
5. It improves the performance of the application.
6. It is used for client side scripting.
7. It is supported by almost every browser.

Selectors in jquery:

Selectors are used to select html elements, we can select an element by its tagname (like p,h1,div etc), id, class name etc.

For selecting an element with its id we use the hash symbol (#) before the name, for selecting an element with its class name we use a dot(.) symbol before it's name to select it.

Example:

```
<p id="opt">Paragraph</p>
<div class="wrap"></div>
```

We use \$("#opt") to select the paragraph with id opt and \$(".wrap") to select the div with the class name wrap.

Important methods in jquery:

1. html() - this method is used to get or set the inner html of an html element, if no parameter is passed to the html method then it returns the inner html of the element otherwise the parameter is set as inner html of the element.
Syntax- \$(selector).html()
2. hide() - this method is used for hiding an element with the selector.
Syntax: \$(selector).hide()

3. `show()` - this method is used for showing an element with the selector.
Syntax: `$(selector).hide()`
4. `val()` - There are two usage of jQuery `val()` method.
It is used to get current value of the first element in the set of matched elements.
It is used to set the value of every matched element.
Syntax- `$(selector).val()` is used to get the value, `$(selector).val(value)` is used to set the value
5. `append()` - The jQuery `append()` method is used to insert specified content as the last child (at the end of) the selected elements in the jQuery collection.
Syntax- `$(selector).append(content)`
6. `remove()` - The jQuery `remove()` method is used to remove the selected elements out of the DOM. It removes the selected element itself, as well as everything inside it (including all texts and child nodes). This method also removes the data and the events of the selected elements.
Syntax - `$(selector).remove()`
7. `attr()` - The jQuery `attr()` method is used to set or return attributes and values of the selected elements. There are two usage of jQuery `attr()` method.
To return attribute value: This method returns the value of the first matched Element.
To set attribute value: This method is used to set one or more attribute/value pairs of the set of matched elements.
Syntax: `$(selector).attr(attribute_name)` // it returns the attribute value of the attribute whose name is passed.
`$(selector).attr(attribute_name,attribute_value)` // it sets an attribute with the specified value.
8. `width()` -it is used to get or set the width of an html element.
Syntax: `$(selector).width()` - used to get the width of an element.
`$(selector).width(value)` - used to set the width of an element.
9. `height()` - it is used to get or set the height of an html element to value.
Syntax: `$(selector).height()` - used to get the height of an element.
`$(selector).height(value)` - used to set the height of an element to value.
10. `click()` - It is used to trigger the click event for the selected elements.
`$(selector).click(function)` - the function will be executed when the element is clicked.

11. `blur()` - The jQuery blur event occurs when element loses focus. It can be generated by via keyboard commands like tab key or mouse click anywhere on the page.