

jQuery

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jQuery

- jQuery is a lightweight Javascript library which is blazing fast and concise. This library was created by John Resig in 2006 and
- jQuery has been designed to simplify HTML DOM tree traversal and manipulation, as well as event handling, CSS animation, and Ajax.
- jQuery is cross-platform.
- jQuery means "write less do more".

jQuery has been developed with the following principles:

- **Separation of JavaScript and HTML**, which encourages developers to completely separate JavaScript code from HTML markup.
- **Brevity and clarity** promotes features like chainable functions and shorthand function names.
- **Eliminates of cross-browser incompatibilities**, so developers does not need to worry about browser compatibility while writing code using jQuery library.
- **Extensibility**, which means new events, elements, and methods can be easily added in jQuery library and then reused as a plugin.

- jQuery is a lightweight, "write less, do more", JavaScript library.
- jQuery became popular as this simplifies the process of working with HTML documents, handling events, animating elements, and making AJAX calls.
 - **DOM Manipulation**
 - **Event Handling**
 - **Effects and Animations**
 - **AJAX (Asynchronous JavaScript and XML):**
 - **DOM Traversal**
 - **jQuery UI**
 - **Plugins**
 - **Deferred and Promises**
 - **Event Delegation**
 - **Cross-Browser Compatibility**
 - **Responsive Web Design**
 - **Form Validation**
 - **Dynamic Content Loading**

jQuery Selectors

- `$()`.
- Element Selector: `$("element")`
- Class Selector: `$(".class")`
- ID Selector: `$("#id")`
- Attribute Selector: `$("[attribute]")`
- Multiple Elements Selector: `$("element1, element2")`
- Descendant Selector: `$("parent descendant")`
- Child Selector: `$("parent > child")`
- Next Adjacent Selector: `$("prev + next")`
- Next Siblings Selector: `$("prev ~ siblings")`

- :first Selector: \$("element:first")
- :last Selector: \$("element:last")
- :even Selector: \$("element:even")
- :odd Selector: \$("element:odd")
- :eq(n) Selector: \$("element:eq(n)")
- :gt(n) Selector: \$("element:gt(n)")
- :lt(n) Selector: \$("element:lt(n)")
- :not(selector) Selector: \$("element:not(selector)")
- :has(selector) Selector: \$("element:has(selector)")
- :contains(text) Selector: \$("element:contains(text)")
- :empty Selector: \$("element:empty")
- :visible Selector: \$("element:visible")
- :hidden Selector: \$("element:hidden")
- :animated Selector: \$("element:animated")

jQuery DOM Manipulation operations

- Extract the content of an element
- Change the content of an element
- Adding a child element under an existing element
- Adding a parent element above an existing element
- Adding an element before or after an existing element
- Replace an existing element with another element
- Delete an existing element
- Wrapping content with-in an element

jQuery Dimension Methods

- **width()** - This method gets or sets the width of an element
- **height()** - This method gets or sets the height of an element
- **innerWidth()** - This method gets or sets the inner width of an element.
- **innerHeight()** - This method gets or sets the inner height of an element.
- **outerWidth()** - This method gets or sets the outer width of an element.
- **outerHeight()** This method gets or sets the outer height of an element.