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A close-up photograph of a person's hand holding a pen, poised to write on a document. The background is blurred, showing what appears to be a desk and some office equipment. The word 'Index' is overlaid in white text on the left side of the image.

# Index

1. What is jQuery?
2. Why using it?
3. Installation and use
4. Syntax
5. Good practices
6. Examples
7. Ajax
8. Plugins
9. Conclusions

# 1. What is jQuery?

# 1. ¿What is jQuery?

- JavaScript Cross-Browser library
- Created by John Resig
- DOM traversal
- DOM manipulation
- Event handling
- Animation
- AJAX

## 2. Why using it?

## 2. ¿Why using it?

- jQuery is widely used
- Open-Source
- Promotes simplicity
- Cross-Browser Compatibility
- Clean syntax
- Lightweight
- SEO friendly
- Utility features

# 3. Installation and use

# 3. Installation and use

1. `<script> https://code.jquery.com/jquery-3.2.1.min.js </script>`

2. `$ npm i -D jquery`

```
APP.use('/jquery', EXPRESS.static(PATH.join(__dirname, '../node_modules/jquery/dist/')));  
import * as jQuery from './jquery/jquery.js';
```



## 4. Syntax

# 4- Syntax

SELECTORS			ATTRIBUTES / CSS		MANIPULATION	TRaversING	EVENTS	EFFECTS	AJAX	CORE		
<b>Basics</b>  class element #id selector1, selectorN, ...  <b>Hierarchy</b> parent > child ancestor descendant prev ~ next prev ~ siblings  <b>Basic Filters</b> animated eq() even first gt() header lang() last lt() not() odd root target  <b>Content Filters</b> :contains() :empty :has() :parent	<b>Visibility Filters</b>  :hidden :visible  <b>Attribute</b> [name]=value [name~="value"] [name =value] [name!=value] [name^="value"] [name\$="value"] [name*="value"]  <b>Child Filters</b> :first-child :first-type :gt() :header :lang() :last :lt() :not() :odd :root :target  :contains() :empty :has() :parent	<b>Forms</b> :button :checkbox :checked :disabled :enabled :focus :file :image :input :password :radio :reset :selected :submit :text  <b>Child Filters</b> :first-child :first-type :last-child :last-of-type :nth-child() :nth-last-child() :nth-last-of-type() :nth-of-type() :only-child :only-of-type()	<b>Attributes</b> :attr() :prop() :removeAttr() :removeAttr() :val()  <b>CSS</b> :addClass() :css() :jQuery.cssHooks :jQuery.cssNumber :jQuery.escapeSelector() :hasClass() :removeClass() :toggleClass()  <b>Data</b> :jQuery.data() :data() :jQuery.hasData() :jQuery.removeData() :removeData()	<b>Dimensions</b> :height() :innerHeight() :innerWidth() :outerHeight() :outerWidth() :width()  <b>Offset</b> :offset() :offsetParent() :position() :scrollLeft() :scrollTop()  <b>Data</b> :jQuery.data() :data() :jQuery.hasData() :jQuery.removeData() :removeData()	<b>Copying</b> :clone()  <b>DOM Insertion, Around</b> :wrap() :wrapAll() :wrapInner()  <b>DOM Insertion, Inside</b> :append() :appendTo() :html() :prepend() :prependTo() :text()  <b>DOM Insertion, Outside</b> :after() :before() :insertAfter() :insertBefore()  <b>DOM Removal</b> :detach() :empty() :remove() :unwrap()  <b>DOM Replacement</b> :replaceAll() :replaceWith()	<b>Filtering</b> :eq() :filter() :first() :has() :is() :last() :map() :not() :slice()  <b>Miscellaneous Traversing</b> :add() :addBack() :andSelf() :contents() :each() :end()  <b>Tree Traversal</b> :children() :closest() :find() :nextAll() :nextUntil() :parent() :parents() :parentsUntil() :prevAll() :prevUntil() :siblings()	<b>Browser Events</b> :click() :resize() :scroll()  <b>Document Loading</b> :ready() :whenReady()  <b>Event Handler Attachment</b> :bind() :delegate() :die() :live() :off() :on() :one() :trigger() :triggerHandler() :unbind() :undelegate()  <b>Form Events</b> :blur() :change() :focus() :focusin() :focusout() :select() :submit()  <b>Keyboard Events</b> :keydown() :keypress() :keyup()	<b>Mouse Events</b> :click() :contextMenu() :dblclick() :hover() :mousedown() :mouseenter() :mouseleave() :mousemove() :mouseover() :mouseout() :mouseup() :stopPropagation()  <b>Event Object</b> event.currentTarget event.delegateTarget event.data event.isDefaultPrevented() event.isImmediatePropagationStopped() event.isPropagationStopped() event.metaKey event.namespace event.pageX event.pageY event.preventDefault() event.relatedTarget event.result event.stopPropagation() event.stopImmediatePropagation() event.target event.timeStamp event.type event.which  <b>Event Object</b> event.currentTarget event.delegateTarget event.data event.isDefaultPrevented() event.isImmediatePropagationStopped() event.isPropagationStopped() event.metaKey event.namespace event.pageX event.pageY event.preventDefault() event.relatedTarget event.result event.stopPropagation() event.stopImmediatePropagation() event.target event.timeStamp event.type event.which	<b>Basics</b> :hide() :show() :toggle()  <b>Custom</b> :animate() :clearQueue() :delay() :dequeue() :jQuery.dequeue() :finish() :jQuery.interval() :jQuery.jQuery() :jQuery.speed() :queue() :jQuery.queue() :stop()  <b>Fading</b> :fadeIn() :fadeOut() :fadeTo() :fadeToggle()  <b>Sliding</b> :slideDown() :slideToggle() :slideUp()	<b>Global Ajax Event Handlers</b> :ajaxComplete() :ajaxError() :ajaxSend() :ajaxStart() :ajaxStop() :ajaxSuccess()  <b>Helper Functions</b> :jQuery.param() :serialize() :serializeArray() :jQuery.sInterval() :jQuery.sjQuery()<		

## 4- Syntax

- Html tag -> \$('p')
- By class -> \$('.someclass')
- By id -> \$('#someid')

```
/** Jquery way to toggle between divs */
#jqueryToggleDiv() {
    $('#jquery').on('click', function() {
        $('#content').toggle();
        $('#alternative').toggle();
    });
}
```

## 5. Good practices

# 5- Good practices

- Naming with dollar sign `$img = $('img')`
- Avoid conflict using `jQuery.noConflict()`
- Cache your jQuery object in a variable
- Use chaining to reduce repetition

```
$('.test').addClass('hello').css('color', 'orange').prop('title', 'Hello world');
```



## 6. Examples

# 6- Examples

- Toggle

<http://10.6.130.141:8080/toggle.html>

```
/** Vanilla javascript way to toggle between divs */
#toggleDiv() {
  if(document.getElementById('content').style.display === 'block') {
    document.getElementById('content').style.display = 'none';
    document.getElementById('alternative').style.display = 'block';
  } else {
    document.getElementById('alternative').style.display = 'none';
    document.getElementById('content').style.display = 'block'
  }
}
```

# 6- Examples

- Fade

<http://10.6.130.141:8080/fade.html>

```
/** JQuery way to fade toggle an image and change button text */
#jqueryFade() {
  this.$jquery.on('click', () => {
    $('#alternative').fadeToggle(600);
    if (this.$jquery.text() === 'Jquery fade in') {
      this.$jquery.text('Jquery fade out');
    } else {
      this.$jquery.text('Jquery fade in');
    }
  });
}
```

```
/** Vanilla way the using css fade in an element
 * @param {Object} element
 */
#fadeIn(element){
  element.classList.add('show');
  element.classList.remove('hide');
}

/** Vanilla way that using css fade out an element
 * @param {Object} element
 */
#fadeOut(element){
  element.classList.add('hide');
  element.classList.remove('show');
}

/** Vanilla way to fade toggle an image and change button text */
#vanillaFade() {
  let img = document.getElementById('alternative');
  let btn = document.getElementById('vanilla');
  btn.addEventListener('click', () => {
    if (img.className.indexOf('hide') !== -1) {
      this.#fadeIn(img);
      btn.innerHTML = 'Vanilla fade out';
    } else {
      this.#fadeOut(img);
      btn.innerHTML = 'Vanilla fade in';
    }
  });
}
```



# 6- Examples

- Slide

<http://10.6.130.141:8080/slide.html>

```
/** Vanilla javascript way to slide an element */
#slideDiv() {
  const slided = document.getElementById('alternative').offsetHeight;
  if(slided === 0) {
    document.getElementById('alternative').style.height = '400px';
  } else {
    document.getElementById('alternative').style.height = '0px';
  }
}
```

```
/** JQuery way to slide an element */
#jquerySlideDiv() {
  $('#jquery').on('click', function() {
    $('#content').slideToggle('slow');
  });
}
```

# 6- Examples

- Shake and mouse over image switch

<http://10.6.130.141:8080/index.html>

```
/** On mouseover an image it switch to another one */
#over() {
  let imageNumber = 3;
  this.#img.on('mouseover', () => {
    this.#img.toggle('drop');
    let imageString = '../img/japan' + imageNumber + '.jpg';
    imageNumber = imageNumber < 6 ? imageNumber : 2;
    imageNumber++;
    this.#img.attr('src', imageString).toggle('drop');
  });
}
```

```
/** First shake the image then replace it with the after version
 * If the after is clicked apply a pulsate effect
 */
#shake() {
  this.#before.on('click', () => {
    this.#before.effect('shake', 'left', () => {
      this.#before.hide();
      this.#after.show();
    });
  });
  this.#after.on('click', () => {
    this.#after.effect('pulsate', 4);
  });
  $('#reset').on('mousedown', () => {
    this.#after.hide();
    this.#before.show();
  });
}
```

# 7. Ajax

# 7. Ajax

- Asynchronous JavaScript And XML
- Gmail, Google Maps, Youtube, Facebook tabs...

# 7. Ajax

```
1. let response;  
2. $.get('foo.txt', function(data) {  
3.   response = data;  
4. })  
5. console.log(response);
```

# 7. Ajax

```
1. $.get( "foo.php", function( response ) {  
2.     console.log( response );  
3. });
```

## 8. Plugins

# 8. Plugins

[plugins.jquery.com](https://plugins.jquery.com)



The screenshot shows the jQuery Plugin Registry website. At the top, there is a dark blue header with a search bar on the right. Below the header, the main title "The jQuery Plugin Registry" is displayed in large white letters. Underneath the title is a large, rounded search bar with the text "Q Search". To the left of the main content area, there is a section titled "Popular Tags" with a list of tags and their counts: ui (542), jquery (482), form (285), animation (273), input (252), image (210), responsive (184), slider (172), ajax (154), and scroll (140). On the right side of the main content area, there is a prominent message in bold text: "The jQuery Plugin Registry is in read-only mode. New plugin releases will not be processed." Below this message, a paragraph explains the recommendation to move to npm, using "jquery-plugin" as the keyword in the package.json, and provides a link to "instructions for publishing your plugin to npm".

Search

## The jQuery Plugin Registry

Q Search

### Popular Tags

- [ui](#) (542)
- [jquery](#) (482)
- [form](#) (285)
- [animation](#) (273)
- [input](#) (252)
- [image](#) (210)
- [responsive](#) (184)
- [slider](#) (172)
- [ajax](#) (154)
- [scroll](#) (140)

**The jQuery Plugin Registry is in read-only mode.  
New plugin releases will not be processed.**

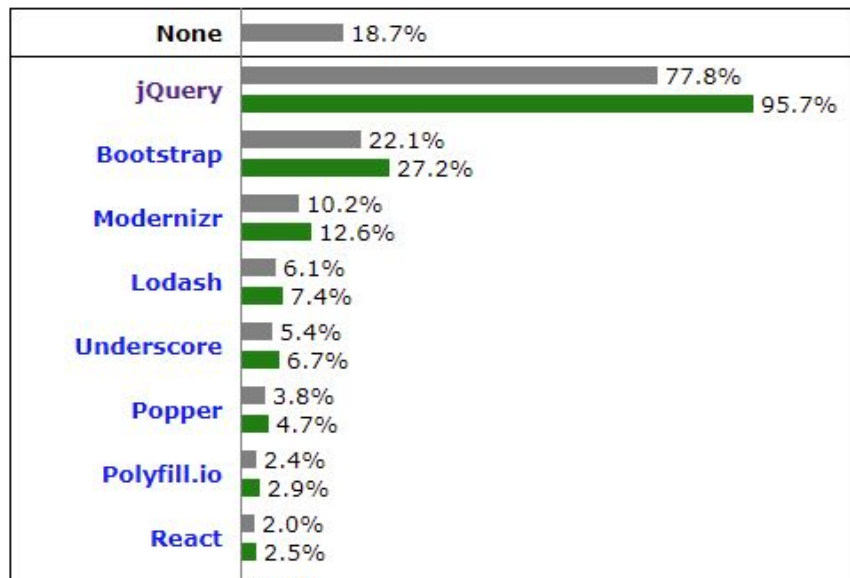
We recommend moving to npm, using "jquery-plugin" as the keyword in your package.json. The npm blog has [instructions for publishing your plugin to npm](#).



## 9. Conclusions

# 9. Conclusions

18.7% of the websites use none of the JavaScript libraries that we monitor.  
jQuery is used by 77.8% of all the websites, that is a JavaScript library market share of 95.7%.



[w3techs usage of jQuery](#)

# 9. Conclusions

[you might not need jquery](#)

## E V E N T S

### Delegate

#### JQUERY

```
$(document).on(eventName, elementSelector, handler);
```

#### IE8+

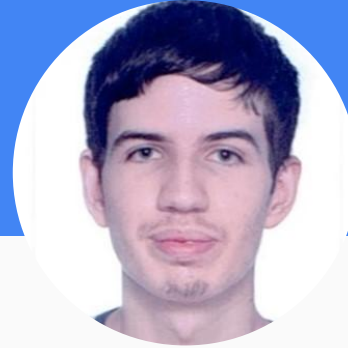
```
document.addEventListener(eventName, function(e) {  
    // loop parent nodes from the target to the delegation  
    for (var target = e.target; target && target !== this; target = target.parentNode) {  
        if (target.matches(elementSelector)) {  
            handler.call(target, e);  
            break;  
        }  
    }  
}, false);
```

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# Bibliography:

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<https://oscarotero.com/jquery/> Cheat Sheet

<http://youmightnotneedjquery.com/> Vanilla Javascript vs jquery methods

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<https://tekslate.com/11-benefits-jquery-every-web-designers-know> Benefits of jquery

[https://w3techs.com/technologies/overview/javascript\\_library](https://w3techs.com/technologies/overview/javascript_library) Usage of jQuery chart

<https://plugins.jquery.com/> jQuery plugins registry