

## Anda tidak memerlukan jQuery

Mutakhir ini perkembangan dalam persekitaran frontend berlaku begitu pesat sekali. Justeru itu kebanyakan pelayar moden telahpun menyediakan API yang memadai untuk pengaksesan DOM/BOM. Kita tak payah lagi belajar jQuery dari asas untuk memanipulasi DOM dan acara-acara. Projek ini menawarkan perlaksanaan alternatif kepada kebanyakan kaedah-kaedah jQuery yang menyokong IE 10+.

## Isi Kandungan

1. [Pemilihan elemen](#)
2. [CSS & Penggayaan](#)
3. [Manipulasi DOM](#)
4. [Ajax](#)
5. [Events](#)
6. [Utiliti](#)
7. [Terjemahan](#)
8. [Browser Support](#)

## Pemilihan Elemen

Pemilihan elemen yang umum seperti class, id atau atribut, biasanya kita boleh pakai `document.querySelector` atau `document.querySelectorAll` sebagai ganti. Bezanya terletak pada

- `document.querySelector` akan mengembalikan elemen pertama sekali yang sepadan dijumpai
- `document.querySelectorAll` akan mengembalikan kesemua elemen yang sepadan dijumpai kedalam sebuah NodeList. Ia boleh ditukar kedalam bentuk array menggunakan  `[].slice.call`
- Sekiranya tiada elemen yang sepadan dijumpai, jQuery akan mengembalikan  `[]`  dimana API DOM pula akan mengembalikan  `null` . Sila ambil perhatian pada Null Pointer Exception

AWAS: `document.querySelector` dan `document.querySelectorAll` agak **LEMBAB** berbanding `getElementById`, `document.getElementsByClassName` atau `document.getElementsByTagName` jika anda menginginkan bonus dari segi prestasi.

- [1.1](#) Pemilihan menggunakan class

```
// jQuery
$('.css');

// Native
document.querySelectorAll('.css');
```

- [1.2](#) Pemilihan menggunakan id

```
// jQuery
$('#id');
```

```
// Native
document.querySelector('#id');
```

- [1.3](#) Pemilihan menggunakan atribut

```
// jQuery
$('a[target=_blank]');

// Native
document.querySelectorAll('a[target=_blank]');
```

- [1.4](#) Cari sth.

- Find nodes

```
// jQuery
$el.find('li');

// Native
el.querySelectorAll('li');
```

- Cari body

```
// jQuery
$('body');

// Native
document.body;
```

- Cari Attribute

```
// jQuery
$el.attr('foo');
```

```
// Native
e.getAttribute('foo');
```

- Cari atribut data

```
// jQuery
$el.data('foo');
```

```
// Native
// menggunakan getAttribute
el.getAttribute('data-foo');
```

```
// anda boleh juga gunakan `dataset` jika ingin pakai IE 11+
el.dataset['foo'];
```

- [1.5](#) Sibling/Previous/Next Elements

- Sibling elements

```
// jQuery
$el.siblings();

// Native
[].filter.call(el.parentNode.children, function(child) {
    return child !== el;
});
```

- Previous elements

```
// jQuery
$el.prev();

// Native
el.previousElementSibling;
```

- Next elements

```
// next
$el.next();
el.nextElementSibling;
```

- [1.6](#) Closest

Return the first matched element by provided selector, traversing from current element to document.

```
// jQuery
$el.closest(queryString);

// Native
function closest(el, selector) {
    const matchesSelector = el.matches || el.webkitMatchesSelector ||
    el.mozMatchesSelector || el.msMatchesSelector;

    while (el) {
        if (matchesSelector.call(el, selector)) {
            return el;
        } else {
            el = el.parentElement;
        }
    }
    return null;
}
```

- [1.7](#) Parents Until

Get the ancestors of each element in the current set of matched elements, up to but not including the element matched by the selector, DOM node, or jQuery object.

```
// jQuery
$.fn.parentsUntil(selector, filter);

// Native
function parentsUntil(el, selector, filter) {
    const result = [];
    const matchesSelector = el.matches || el.webkitMatchesSelector ||
    el.mozMatchesSelector || el.msMatchesSelector;

    // match start from parent
    el = el.parentElement;
    while (el && !matchesSelector.call(el, selector)) {
        if (!filter) {
            result.push(el);
        } else {
            if (matchesSelector.call(el, filter)) {
                result.push(el);
            }
        }
        el = el.parentElement;
    }
    return result;
}
```

- [1.8](#) Form

- Input/Textarea

```
// jQuery
$('#my-input').val();

// Native
document.querySelector('#my-input').value;
```

- Get index of e.currentTarget between `.radio`

```
// jQuery
$(e.currentTarget).index('.radio');

// Native
[].indexOf.call(document.querySelectorAll('.radio'), e.currentTarget);
```

- [1.9](#) Iframe Contents

`$('#iframe').contents()` returns `contentDocument` for this specific iframe

- Iframe contents

```
// jQuery
$('#iframe').contents();
```

```
// Native
iframe.contentDocument;
```

- Iframe Query

```
// jQuery
$iframe.contents().find('.css');

// Native
iframe.contentDocument.querySelectorAll('.css');
```

[↑ back to top](#)

## CSS & Style

- [2.1](#) CSS

- Get style

```
// jQuery
$el.css("color");

// Native
// NOTE: Known bug, will return 'auto' if style value is 'auto'
const win = el.ownerDocument.defaultView;
// null means not return pseudo styles
win.getComputedStyle(el, null).color;
```

- Set style

```
// jQuery
$el.css({ color: "#ff0011" });

// Native
el.style.color = '#ff0011';
```

- Get/Set Styles

Note that if you want to set multiple styles once, you could refer to [setStyles](#) method in oui-dom-utils package.

- Add class

```
// jQuery
$el.addClass(className);

// Native
el.classList.add(className);
```

- Remove class

```
// jQuery
$el.removeClass(className);

// Native
el.classList.remove(className);
```

- has class

```
// jQuery
$el.hasClass(className);

// Native
el.classList.contains(className);
```

- Toggle class

```
// jQuery
$el.toggleClass(className);

// Native
el.classList.toggle(className);
```

- [2.2](#) Width & Height

Width and Height are theoretically identical, take Height as example:

- Window height

```
// window height
$(window).height();
// without scrollbar, behaves like jQuery
window.document.documentElement.clientHeight;
// with scrollbar
window.innerHeight;
```

- Document height

```
// jQuery
$(document).height();

// Native
document.documentElement.scrollHeight;
```

- Element height

```
// jQuery
$el.height();
```

```
// Native
function getHeight(el) {
  const styles = this.getComputedStyle(el);
  const height = el.offsetHeight;
  const borderTopWidth = parseFloat(styles.borderTopWidth);
  const borderBottomWidth = parseFloat(styles.borderBottomWidth);
  const paddingTop = parseFloat(styles.paddingTop);
  const paddingBottom = parseFloat(styles.paddingBottom);
  return height - borderBottomWidth - borderTopWidth - paddingTop -
paddingBottom;
}
// accurate to integer (when `border-box`, it's `height`; when
`content-box`, it's `height + padding + border`)
el.clientHeight;
// accurate to decimal (when `border-box`, it's `height`; when
`content-box`, it's `height + padding + border`)
el.getBoundingClientRect().height;
```

- [2.3 Position & Offset](#)

- Position

```
// jQuery
$el.position();

// Native
{ left: el.offsetLeft, top: el.offsetTop }
```

- Offset

```
// jQuery
$el.offset();

// Native
function getOffset (el) {
  const box = el.getBoundingClientRect();

  return {
    top: box.top + window.pageYOffset -
document.documentElement.clientTop,
    left: box.left + window.pageXOffset -
document.documentElement.clientLeft
  }
}
```

- [2.4 Scroll Top](#)

```
// jQuery
$(window).scrollTop();

// Native
(document.documentElement && document.documentElement.scrollTop) ||
document.body.scrollTop;
```

[↑ back to top](#)

## DOM Manipulation

- [3.1](#) Remove

```
// jQuery
$el.remove();

// Native
el.parentNode.removeChild(el);
```

- [3.2](#) Text

- Get text

```
// jQuery
$el.text();

// Native
el.textContent;
```

- Set text

```
// jQuery
$el.text(string);

// Native
el.textContent = string;
```

- [3.3](#) HTML

- Get HTML

```
// jQuery
$el.html();

// Native
el.innerHTML;
```

- Set HTML



```
// jQuery
$el.html(htmlString);

// Native
el.innerHTML = htmlString;
```

- [3.4](#) Append

append child element after the last child of parent element

```
// jQuery
$el.append("<div id='container'>hello</div>");

// Native
let newEl = document.createElement('div');
newEl.setAttribute('id', 'container');
newEl.innerHTML = 'hello';
el.appendChild(newEl);
```

- [3.5](#) Prepend

```
// jQuery
$el.prepend("<div id='container'>hello</div>");

// Native
let newEl = document.createElement('div');
newEl.setAttribute('id', 'container');
newEl.innerHTML = 'hello';
el.insertBefore(newEl, el.firstChild);
```

- [3.6](#) insertBefore

Insert a new node before the selected elements

```
// jQuery
$newEl.insertBefore(queryString);

// Native
const target = document.querySelector(queryString);
target.parentNode.insertBefore(newEl, target);
```

- [3.7](#) insertAfter

Insert a new node after the selected elements

```
// jQuery
$newEl.insertAfter(queryString);

// Native
```

```
const target = document.querySelector(queryString);
target.parentNode.insertBefore(newEl, target.nextSibling);
```

[↑ back to top](#)

## Ajax

Replace with [fetch](#) and [fetch-jsonp](#)

[↑ back to top](#)

## Events

For a complete replacement with namespace and delegation, refer to <https://github.com/oneuijs/oui-dom-events>

- [5.1](#) Bind an event with on

```
// jQuery
$el.on(eventName, eventHandler);

// Native
el.addEventListener(eventName, eventHandler);
```

- [5.2](#) Unbind an event with off

```
// jQuery
$el.off(eventName, eventHandler);

// Native
el.removeEventListener(eventName, eventHandler);
```

- [5.3](#) Trigger

```
// jQuery
$(el).trigger('custom-event', {key1: 'data'});

// Native
if (window.CustomEvent) {
  const event = new CustomEvent('custom-event', {detail: {key1: 'data'}});
} else {
  const event = document.createEvent('CustomEvent');
  event.initCustomEvent('custom-event', true, true, {key1: 'data'});
}

el.dispatchEvent(event);
```

[↑ back to top](#)

## Utility

- [6.1](#) isArray

```
// jQuery
$.isArray(range);

// Native
Array.isArray(range);
```

- [6.2](#) Trim

```
// jQuery
$.trim(string);

// Native
String.trim(string);
```

- [6.3](#) Object Assign

Extend, use object.assign polyfill <https://github.com/ljharb/object.assign>

```
// jQuery
$.extend({}, defaultOpts, opts);

// Native
Object.assign({}, defaultOpts, opts);
```

- [6.4](#) Contains

```
// jQuery
$.contains(el, child);

// Native
el !== child && el.contains(child);
```

[↑ back to top](#)

## Terjemahan

- [한국어](#)
- [简体中文](#)
- [English](#)
- [Русский](#)
- [Türkçe](#)

## Sokongan Pelayar

|  |   |  |   |  |
|--|---|--|---|--|
|  Chrome |  Firefox |  IE |  Opera |  Safari |
|  |   |  |   |  |

|          |          |       |          |        |
|----------|----------|-------|----------|--------|
| Latest ✓ | Latest ✓ | 10+ ✓ | Latest ✓ | 6.1+ ✓ |
|----------|----------|-------|----------|--------|

# Lesen

MIT