

jQuery-free JavaScript

Native Selectors

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pluralsight 
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Native Selectors



Selectors

jQuery

```
$("#datepicker");  
$("input");  
$(".date");  
$("input.date");
```

Native

```
document.getElementById("datepicker");  
document.getElementsByTagName("input");  
document.getElementsByClassName("date");  
document.querySelectorAll("div.date");  
document.querySelector("div.date");
```

Each

jQuery

```
$("#input.date").each(function(index, element) {  
    $(element).text("Hello: " + index);  
});
```

Native: Option 1

```
var nodes = document.querySelectorAll("input.date"), i;  
  
for (i = 0, len = nodes.length; i < len; ++i) {  
    nodes[i].innerText = "Hello: " + i;  
};
```

Each

Native: Option 2

```
var nodes = document.querySelectorAll("input.date"),  
    elems = Array.prototype.slice.call(nodes);
```

```
elems.forEach(function(element, index) {  
    element.innerText = "Hello: " + index;  
});
```

Native: Option 3

```
var nodes = document.querySelectorAll("input.date");
```

```
[].forEach.call(nodes, function(element, index) {  
    element.innerText = "Hello: " + index;  
});
```

Each

Native: Option 4

```
function $(selector) {  
    return  
        [].slice.call(document.querySelectorAll(selector));  
}
```

```
$("#input.date").forEach(function(element, index) {  
    element.innerText = "Hello: " + index;  
});
```

Index

jQuery

```
$("#div.date").eq(3);
```

```
$("#div.date").get(3);
```

```
$("#div.date")[3];
```

Native

```
document.querySelectorAll("#div.date").item(3);
```

```
document.querySelectorAll("#div.date")[3];
```

First, Last

jQuery

```
var $dates = $("div.date");
```

```
$dates.first();           // jQuery object w/ 1st element  
$dates.eq(0);             // jQuery object w/ 1st element  
$dates.get(0);            // First DOM element  
$dates[0];                // First DOM element
```

```
$dates.last();            // jQuery object w/ last element  
$dates.eq(-1);            // jQuery object w/ last element  
$dates.get(-1);           // Last DOM element  
$dates[$dates.length - 1]; // Last DOM element
```


First, Last

Native

```
var dates = document.querySelectorAll("div.date");
```

```
dates[0];
```

```
document.querySelector("div.date");
```

```
dates[dates.length - 1];
```

```
[].pop.call(dates);
```

Is

jQuery

```
$("#widget").is("input.date")
```

Native

```
document.if (Element && !Element.prototype.matches) {  
  var proto = Element.prototype;  
  proto.matches = proto.matchesSelector ||  
    proto.mozMatchesSelector ||  
    proto.msMatchesSelector ||  
    proto.oMatchesSelector ||  
    proto.webkitMatchesSelector;  
}
```

Polyfill: <http://manor.im/jquery-free-repo>

Filter

jQuery

```
var dates = $("div.date");
```

```
dates.filter("[pattern]");
```

```
dates.filter(function(index) {  
    return !!$(this).val().length;  
});
```

Filter

Native

```
var nodes =  
    [].slice.call(document.querySelectorAll("div.date"));  
  
nodes = nodes.filter(function(element) {  
    return element.matches("[pattern]");  
});  
  
nodes = nodes.filter(function(element) {  
    return !!element.value.length;  
});
```

Find

jQuery

```
$("#main").find("input.date");
```

```
$("div").find("input.date");
```

Native

```
document.getElementById("main")  
    .querySelectorAll("input.date");
```

```
var divs = document.querySelectorAll("div"), inputs = [];  
[].forEach.call(divs, function(div) {  
    inputs =  
        inputs.concat([].slice.call(div.querySelectorAll("p")));  
});
```

Next, Previous

jQuery

```
var element = $("#widget"),  
    prev = element.prev(),  
    next = element.next();
```

Native

```
var element = document.getElementById("widget"),  
    prev = element.previousElementSibling,  
    next = element.nextElementSibling;
```

Closest

jQuery

```
$("#detail-123").closest("li")
```

Native: Option 1

```
var element = document.getElementById("detail-123"),  
    found = false;
```

```
while (!found && element instanceof Element) {  
    found = element.matches("li");  
    element = !found ? element.parentNode : element;  
}
```

```
console.log(found ? element : null);
```

Closest

Native: Option 2

```
if (Element && !Element.prototype.closest) {  
  Element.prototype.closest = function(selector, filter) {  
    var node = this, found;  
    filter = typeof filter === 'string' ?  
      document.querySelector(filter) : filter;  
    while (node instanceof Element &&  
      !(found = node.matches(selector)) &&  
      node !== filter) {  
  
      document.getElementById("detail-123").closest("li");  
  
      http://manor.im/jquery-free-repo  
  
    }  
  }  
}
```


DEMO

- **Selectors**
- **Each**
- **Index**
- **Filter**
- **Find**
- **First/Last**
- **Is**
- **Next/Previous**
- **Closest**

Summary

```
var $divs = $("div");
```

```
$ds.each(function(i, e) {});
```

```
var $div = $ds.eq(3);
```

```
$div.is(".widget");
```

```
$divs.filter(".widget");
```

```
$div.find("input");
```

```
var $next = $div.next();
```

```
var $from = $next.closest("form");
```

```
var divs = document.querySelectorAll("div");
```

```
[].forEach.call(ds, function(e, i) {});
```

```
var div = divs[3];
```

```
div.matches(".widget");
```

```
divs.filter(function(e) {  
    return e.matches(".widget");  
});
```

```
div.querySelectorAll("input");
```

```
var next = div.nextElementSibling;
```

```
var form = next.closest("form");
```