



JQuery

FDP 5.0



Nội dung

- ❖ Giới thiệu
- ❖ Selectors
- ❖ Events
- ❖ Effects

Giới thiệu

- ❖ jQuery (jQ) là một thư viện Javascript
- ❖ Làm đơn giản hóa lập trình JS
- ❖ Đưa jQ vào website:
 - ❖ Download jQuery Library: <https://jquery.com/download/>
 - ❖ Include jQuery từ các CDN (content delivery network)
- ❖ Một vài CDN nổi tiếng:
 - ❖ Google CDN:
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
 - ❖ Khác: <https://tech.bizflycloud.vn/top-10-nha-cung-cap-cdn-tot-nhat-2018-tren-the-gioi-phan-1-20180424161956141.htm>

- ❖ jQuery =
 - ❖ **select (query)** các phần tử HTML, và
 - ❖ Thực thi **action** lên chúng
- ❖ Cú pháp: **$\$(selector).action()$**
 - ❖ \$: báo hiệu sử dụng jQ
 - ❖ Selector: query phần tử HTML
 - ❖ Action(): thực thi lên phần tử HTML đó
- ❖ Ví dụ:
 - ❖ $\$(this).hide()$: Ẩn phần tử hiện hành
 - ❖ $\$("p").hide()$: Ẩn tất cả thẻ p
 - ❖ $\$(".test").hide()$: Ẩn tất cả phần tử có class="test".
 - ❖ $\$("#test").hide()$: Ẩn tất cả phần tử có id="test".

Selectors

- ❖ Quan trọng nhất của thư viện jQuery.
- ❖ Selector jQuery được dùng để truy xuất phần tử HTML dựa vào: tên, class, id, thuộc tính, giá trị của thuộc tính, ...
- ❖ Element selector: `$("p")`
- ❖ Id selector: `$("#test")`
- ❖ Class selector: `$(".test")`

Selectors

<code>\$(":button")</code>	Selects all <code><button></code> elements and <code><input></code> elements of <code>type="button"</code>
<code>\$("tr:even")</code>	Selects all even <code><tr></code> elements
<code>\$("tr:odd")</code>	Selects all odd <code><tr></code> elements

Syntax	Description
<code>\$("*")</code>	Selects all elements
<code>\$(this)</code>	Selects the current HTML element
<code>\$("p.intro")</code>	Selects all <code><p></code> elements with <code>class="intro"</code>
<code>\$("p:first")</code>	Selects the first <code><p></code> element
<code>\$("ul li:first")</code>	Selects the first <code></code> element of the first <code></code>
<code>\$("ul li:first-child")</code>	Selects the first <code></code> element of every <code></code>
<code>\$("[href]")</code>	Selects all elements with an href attribute
<code>\$("a[target='_blank']")</code>	Selects all <code><a></code> elements with a target attribute value equal to <code>"_blank"</code>

Events

- ❖ Một số sự kiện phổ biến
 - ❖ Sự kiện chuột: click, dbclick, mouseenter, mouseleave
 - ❖ Sự kiện bàn phím: keypress, keydown, keyup
 - ❖ Sự kiện form: submit, change, focus, blur
 - ❖ Sự kiện của document/window: load, resize, scroll, unload
- ❖ Gắn sự kiện vào selector:
 - ❖ `$("#p").click();`
 - ❖ Ví dụ:

```
$("#p").click(function(){  
    // action goes here!!  
});
```

Events

Một số sự kiện phổ biến

- ❖ `$(document).ready():` Xảy ra khi tài liệu đã load xong.
- ❖ `Click():`

```
$("#p").click(function(){  
    $(this).hide();  
});
```
- ❖ `Dbclick():`

```
$("#p").dblclick(function(){  
    $(this).hide();  
});
```
- ❖ `Mouseenter():`

```
$("#p1").mouseenter(function(){  
    alert("You entered p1!");  
});
```

Events

Một số sự kiện phổ biến

```
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("p").click(function(){
    $(this).hide();
  });
});
</script>
</head>
<body>

<p>If you click on me, I will disappear.</p>
<p>Click me away!</p>
<p>Click me too!</p>

</body>
</html>
```

If you click on me, I will disappear.

Click me away!

Click me too!

Effects

Hide()

❖ Hide, Show, Toggle, Slide, Fade, and Animate

```
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $(".ex .hide").click(function(){
    $(this).parents(".ex").hide("slow");
  });
});
</script>
<style>
div.ex {
  background-color: #e5eecc;
  padding: 7px;
  border: solid 1px #c3c3c3;
}
</style>
</head>
<body>
```

```
<h3>Island Trading</h3>

<div class="ex">
  <button class="hide">Hide me</button>
  <p>Contact: Helen Bennett<br>
  Garden House Crowther Way<br>
  London</p>
</div>

<h3>Paris Specialities</h3>

<div class="ex">
  <button class="hide">Hide me</button>
  <p>Contact: Marie Bertrand<br>
  265, Boulevard Charonne<br>
  Paris</p>
</div>

</body>
</html>
```

Island Trading

Hide me

Contact: Helen Bennett
Garden House Crowther Way
London

Paris Specialities

Hide me

Contact: Marie Bertrand
265, Boulevard Charonne
Paris

Effects

Hide()

❖ Hide, Show, Toggle, Slide, Fade, and Animate

```
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/l
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    $("p").hide(1000);
  });
});
</script>
</head>
<body>

<button>Hide</button>

<p>This is a paragraph with little content.</p>
<p>This is another small paragraph.</p>

</body>
</html>
```

Hide

This is a paragraph with little content.

This is another small paragraph.

Effects

Hide()

❖ Hide, Show, Toggle, Slide, Fade, and Animate

```
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/l
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    $("p").hide(1000);
  });
});
</script>
</head>
<body>

<button>Hide</button>

<p>This is a paragraph with little content.</p>
<p>This is another small paragraph.</p>

</body>
</html>
```

Hide

This is a paragraph with little content.

This is another small paragraph.

Effects

toggle()

```
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    $("p").toggle();
  });
});
</script>
</head>
<body>

<button>Toggle between hiding and showing the paragraphs</button>

<p>This is a paragraph with little content.</p>
<p>This is another small paragraph.</p>

</body>
</html>
```

Toggle between hiding and showing the paragraphs

This is a paragraph with little content.

This is another small paragraph.

Effects

❖ Làm phai màu: fadeIn, fadeOut, fadeToggle, fadeTo

fade()

```
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    $("#div1").fadeIn();
    $("#div2").fadeIn("slow");
    $("#div3").fadeIn(3000);
  });
});
</script>
</head>
<body>
```

```
<div id="div3" style="width:80px;height:80px;display:none;background-
color:blue;"></div>

</body>
</html>
```

<p>Demonstrate fadeIn() with different parameters.</p>

<button>Click to fade in boxes</button>


```
<div id="div1" style="width:80px;height:80px;display:none;background-
color:red;"></div><br>
<div id="div2" style="width:80px;height:80px;display:none;background-
color:green;"></div><br>
```

Demonstrate fadeIn()

Click to fade in boxes



Effects

slide()

```
<html>
<head>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("#flip").click(function(){
    $("#panel").slideToggle("slow");
  });
});
</script>
<style>
#panel, #flip {
  padding: 5px;
  text-align: center;
  background-color: #e5eccc;
  border: solid 1px #c3c3c3;
}

```

Click to slide the panel down or up

Hello world!

❖ Trượt: slideDown, slideUp, slideToggle

```
#panel {
  padding: 50px;
  display: none;
}
</style>
</head>

```

```
<body>
<div id="flip">Click to slide the panel down or up</div>
<div id="panel">Hello world!</div>
</body>
</html>

```

Effects

Animate()

```
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    $("div").animate({
      height: 'toggle'
    });
  });
});
</script>
</head>
<body>
```

<p>Click the button multiple times to toggle the animation.</p>

<button>Start Animation</button>

<p>By default, all HTML elements have a static position, and cannot be moved. To manipulate the position, remember to first set the CSS position property of the element to relative, fixed, or absolute!</p>

```
<div style="background:#98bf21;height:100px;width:100px;position:absolute;">
</div>
```

Click the button multiple times to toggle the animation

Start Animation

By default, all HTML elements have a static position, and cannot be moved. To manipulate the position, remember to first set the CSS position property of the element to relative, fixed, or absolute!



Effects

Animate()

```
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    var div = $("div");
    div.animate({left: '100px'}, "slow");
    div.animate({fontSize: '3em'}, "slow");
  });
});
</script>
</head>
<body>
```

```
<button>Start Animation</button>
```

<p>By default, all HTML elements have a static position, and cannot be moved. To manipulate the position, remember to first set the CSS position property of the element to relative, fixed, or absolute!</p>

```
<div
style="background:#98bf21;height:100px;width:200px;position:absolute;">HELLO
</div>
```

Start Animation

By default, all HTML elements have a static position, remember to first set the CSS position property of the element to relative, fixed, or absolute!

HELLO

Effects

Animate()

```
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    var div = $("div");
    div.animate({height: '300px', opacity: '0.4'}, "slow");
    div.animate({width: '300px', opacity: '0.8'}, "slow");
    div.animate({height: '100px', opacity: '0.4'}, "slow");
    div.animate({width: '100px', opacity: '0.8'}, "slow");
  });
});
</script>
</head>
<body>

<button>Start Animation</button>

<p>By default, all HTML elements have a static position, and cannot be
moved. To manipulate the position, remember to first set the CSS position
property of the element to relative, fixed, or absolute!</p>

<div style="background:#98bf21;height:100px;width:100px;position:absolute;">
</div>
```

Start Animation

By default, all HTML elements have a static position, remember to first set the CSS position property of the element to relative, fixed, or absolute!

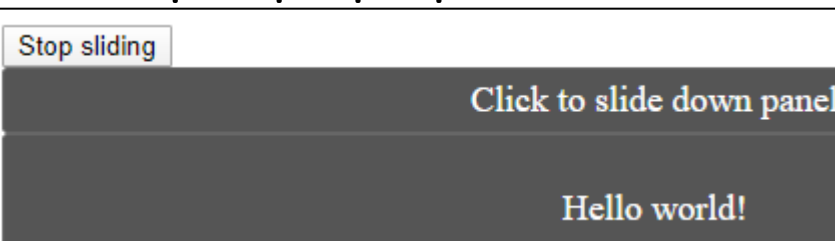


Effects

stop()

❖ Dùng để kết thúc hoạt hình hoặc một sự kiện nào đó.

```
<script
src="https://ajax.googleapis.com/a
</script>
<script>
$(document).ready(function(){
  $("#flip").click(function(){
    $("#panel").slideDown(5000);
  });
  $("#stop").click(function(){
    $("#panel").stop();
  });
});
</script>
<style>
#panel, #flip {
padding: 5px;
font-size: 18px;
text-align: center;
background-color: #555;
color: white;
border: solid 1px #666;
border-radius: 3px;
}
```



```
#panel {
padding: 50px;
display: none;
}
</style>
</head>
<body>

<button id="stop">Stop sliding</button>

<div id="flip">Click to slide down panel</div>
<div id="panel">Hello world!</div>

</body>
</html>
```

Effects

callback

- ❖ Được thực thi sau khi hiệu ứng hoàn thành 100% (tránh lỗi khi hiệu ứng

```
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
        $("p").hide("slow", function(){
      alert("The paragraph is now hidden");
    });
  });
});
</script>
</head>
<body>

<button>Hide</button>

<p>This is a paragraph with little content.</p>

</body>
</html>
```

Hide

This is a paragraph with little content.

Effects

callback

- ❖ Được thực thi sau khi hiệu ứng hoàn thành 100% (tránh lỗi khi hiệu ứng chưa kết thúc)

```
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    $("p").hide(1000);
    alert("The paragraph is now hidden");
  });
});
</script>
</head>
<body>

<button>Hide</button>

<p>This is a paragraph with little content.</p>

</body>
</html>
```

Hide

This is a paragraph with little content.

Effects

Chaining

❖ Gắn nhiều hiệu ứng cho phần tử

```
<!DOCTYPE html>
<html>
<head>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
<script>
$(document).ready(function(){
  $("button").click(function(){
    $("#p1").css("color", "red")
    .slideUp(2000)
    .slideDown(2000);
  });
});
</script>
</head>
<body>

<p id="p1">jQuery is fun!!</p>

<button>Click me</button>

</body>
</html>
```

jQuery is fun!!

Click me

Thank you and
happy learning !!!