



jQuery

Effects, Chaining function calls, jQuery Plugins

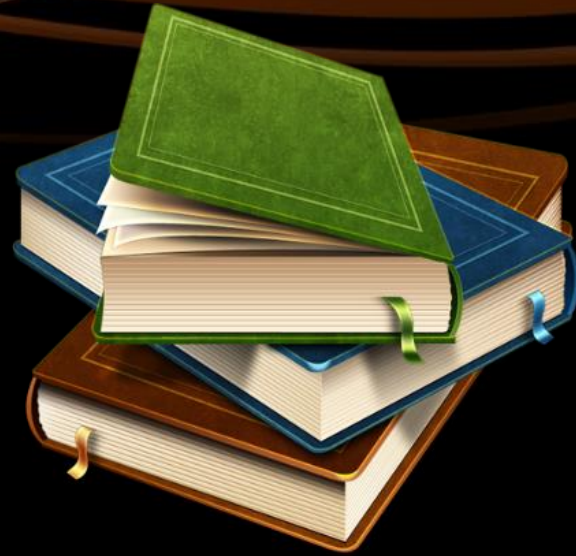
Au Mau Duong
Technical Trainers

September 2013						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
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jQuery
write less, do more.

Animate():

Delay():

fadeToggle():

fadeTo():

clearQueue():

finish():



dequeue():

slideDown():

slideUp():

slideDown():

Toggle():

slideToggle():

jQuery Effects

jQuery Effects - Hide and Show

- Syntax

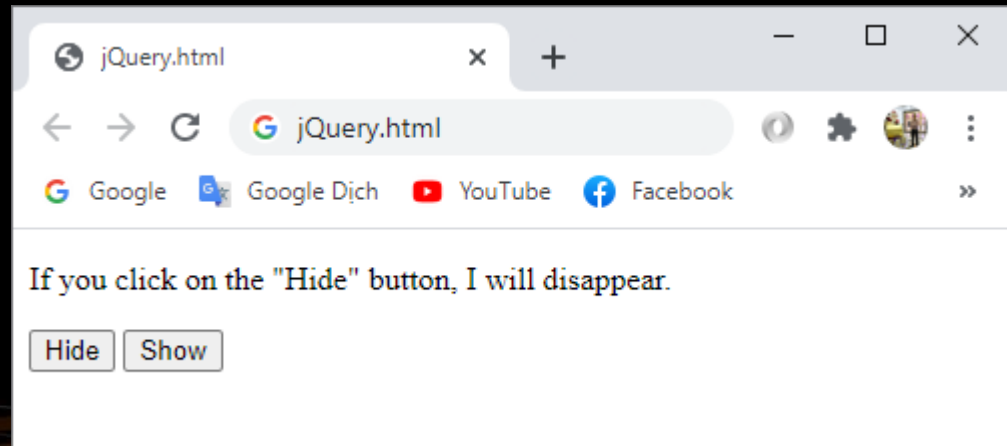
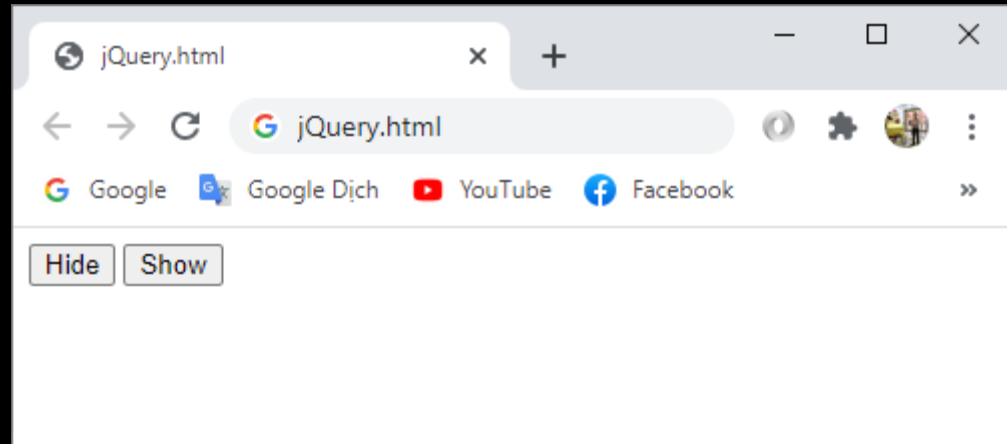
- `$(selector).hide(speed,callback);`
- `$(selector).show(speed,callback);`

- The optional speed parameter specifies the speed of the hiding/showing, and can take the following values: "slow", "fast", or milliseconds.
- The optional **callback** parameter is a function to be **executed** after the **hide()** or **show()** method **completes** (you will learn more about callback functions in a later chapter)

jQuery Effects – Hide() and Show()

```
<p>If you click on the "Hide" button, I will disappear.</p>  
<button id="hide">Hide</button>  
<button id="show">Show</button>
```

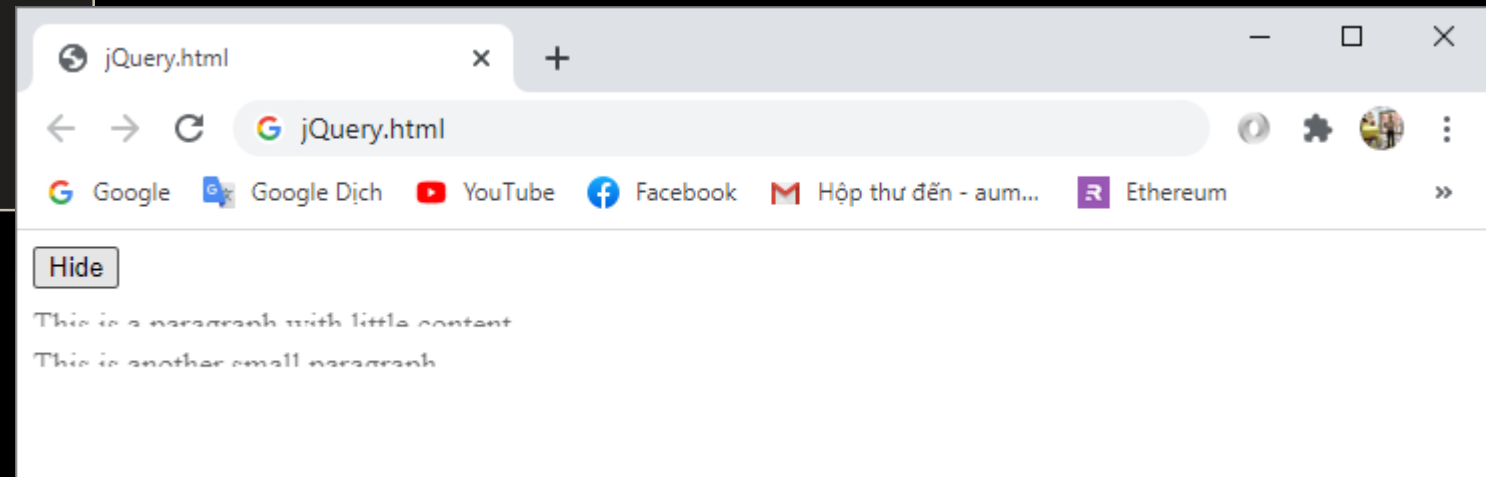
```
<script>  
$(document).ready(function(){  
  $("#hide").click(function(){  
    $("p").hide();  
  });  
  $("#show").click(function(){  
    $("p").show();  
  });  
});  
</script>
```



jQuery Effects – Hide() with speed

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

```
<script>
$(document).ready(function(){
    $("button").click(function(){
        $("p").hide(1000);
    });
});
</script>
```

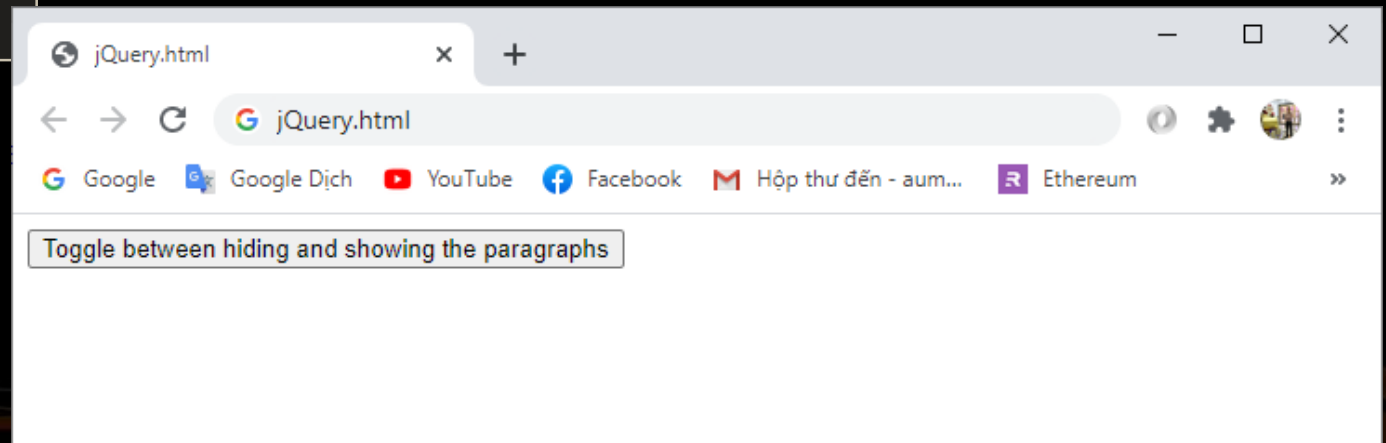
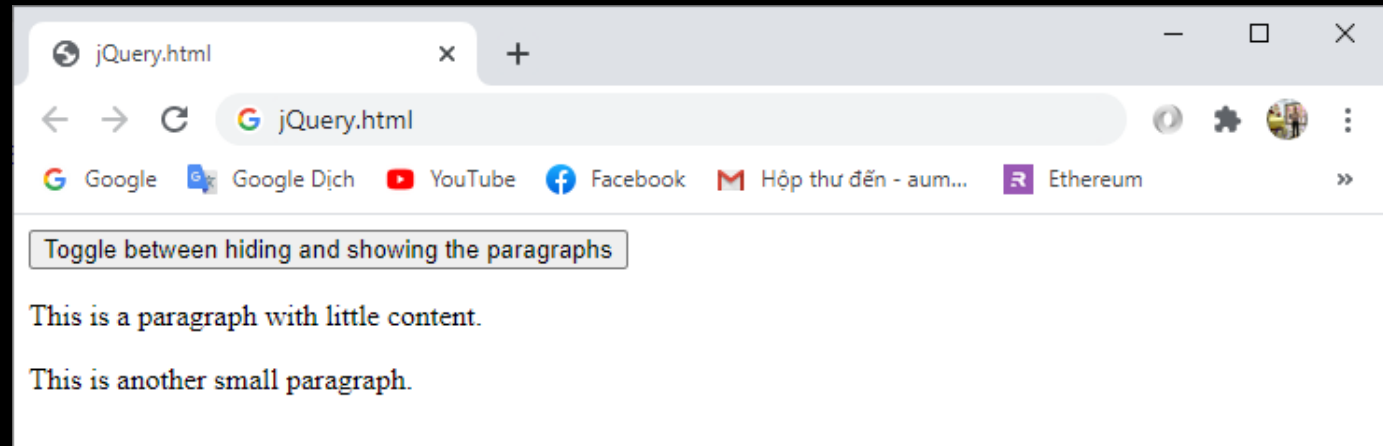


jQuery Effects – toggle()

```
<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>
```

```
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("p").toggle();  
    });  
});  
</script>
```

Shown elements are
hidden and hidden
elements are shown



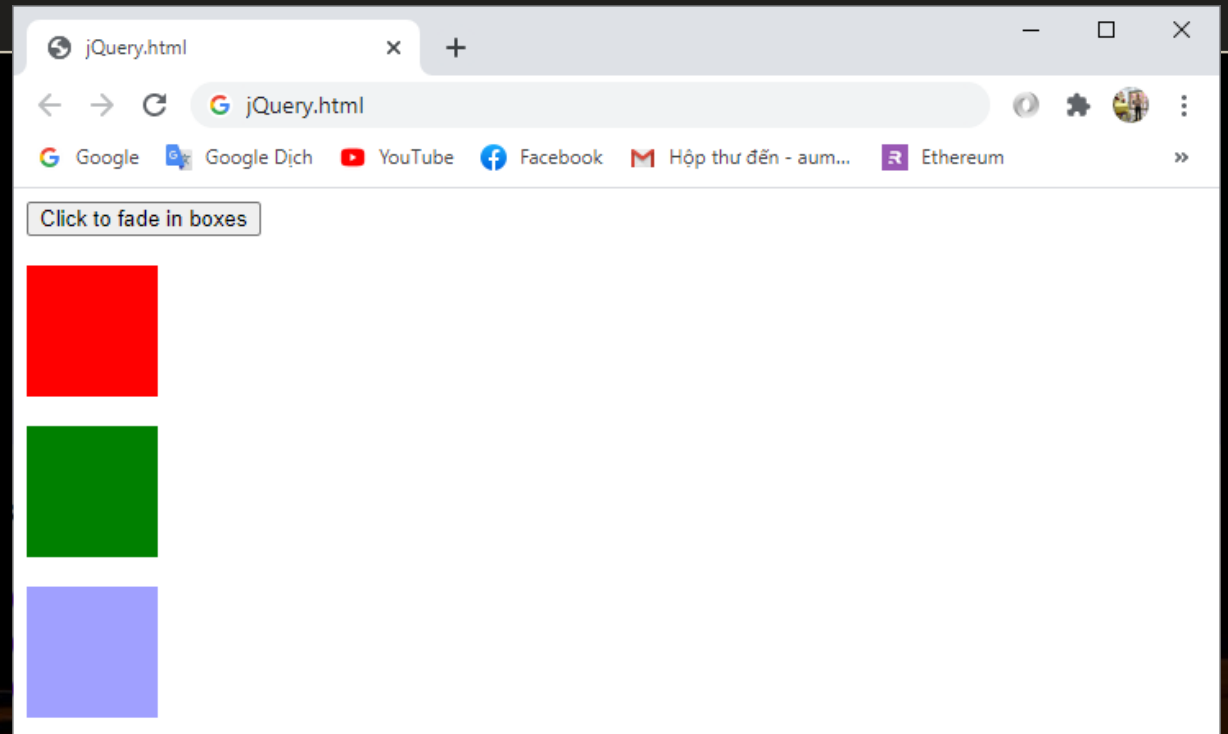
jQuery Effects - Fading

- With jQuery you can fade an element in and out of visibility.
- jQuery has the following fade methods
 - fadeIn()
 - fadeOut()
 - fadeToggle()
 - fadeTo()

jQuery Effects – Fading – fadeIn()

```
<button>Click to fade in boxes</button><br><br>
<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>
<div id="div3" style="width:80px;height:80px;display:none;background-
color:blue;"></div>
```

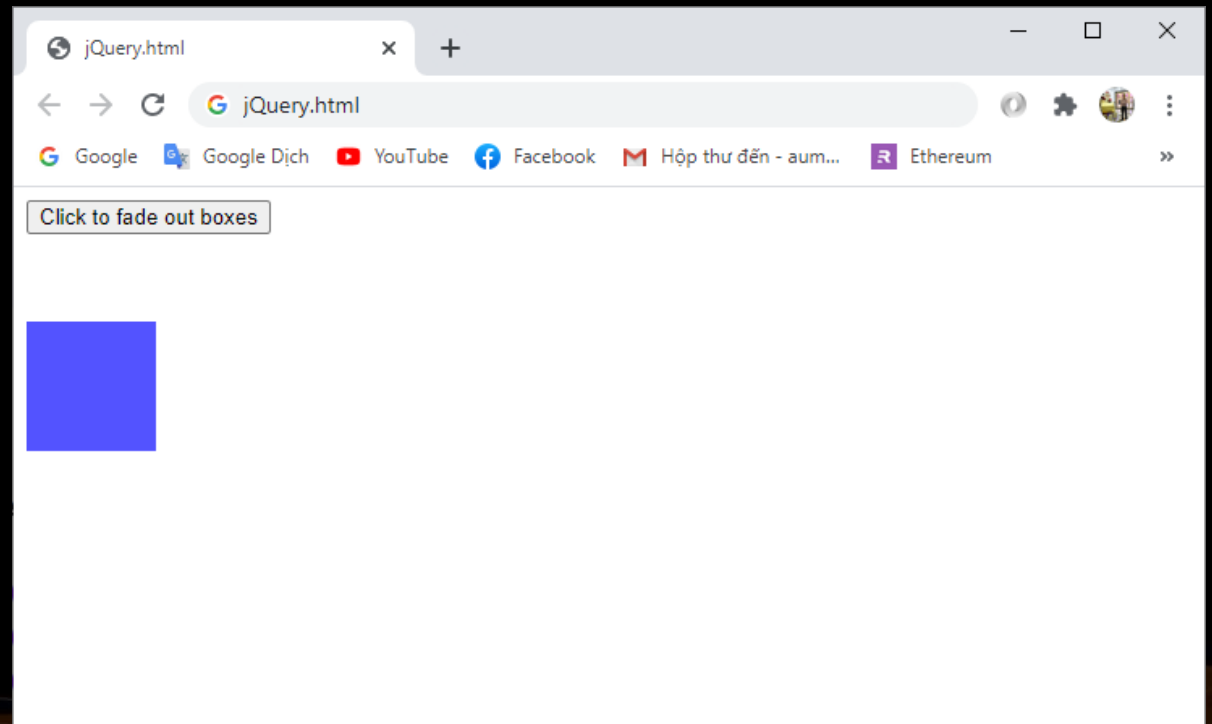
```
<script>
$(document).ready(function(){
    $("button").click(function(){
        $("#div1").fadeIn();
        $("#div2").fadeIn("slow");
        $("#div3").fadeIn(3000);
    });
});
</script>
```



jQuery Effects – Fading – fadeOut()

```
<button>Click to fade out boxes</button><br><br>
<div id="div1" style="width:80px;height:80px;background-
color:red;"></div><br>
<div id="div2" style="width:80px;height:80px;background-
color:green;"></div><br>
<div id="div3" style="width:80px;height:80px;background-color:blue;"></div>
```

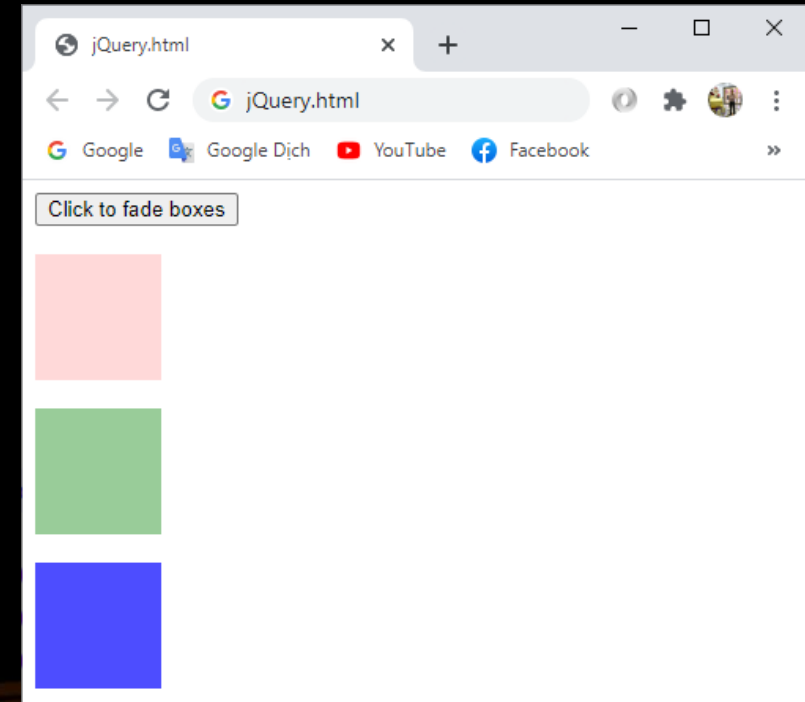
```
<script>
$(document).ready(function(){
    $("button").click(function(){
        $("#div1").fadeOut();
        $("#div2").fadeOut("slow");
        $("#div3").fadeOut(3000);
    });
});
</script>
```



jQuery Effects – Fading – fadeToggle()

```
<button>Click to fade boxes</button><br><br>
<div id="div1" style="width:80px;height:80px;background-
color:red;"></div><br>
<div id="div2" style="width:80px;height:80px;background-
color:green;"></div><br>
<div id="div3" style="width:80px;height:80px;background-color:blue;"></div>
```

```
<script>
$(document).ready(function(){
    $("button").click(function(){
        $("#div1").fadeTo("slow", 0.15);
        $("#div2").fadeTo("slow", 0.4);
        $("#div3").fadeTo("slow", 0.7);
    });
});
</script>
```



jQuery Effects - Sliding

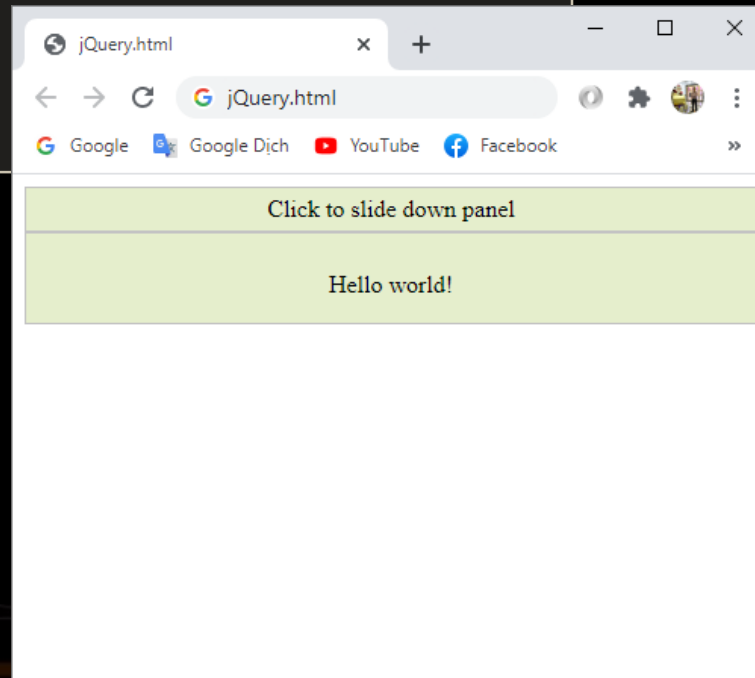
- With jQuery you can create a sliding effect on elements.
- jQuery has the following slide methods
 - `slideDown()`
 - `slideUp()`
 - `slideToggle()`

jQuery Effects – Sliding – slideDown()

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

```
<script>
$(document).ready(function(){
    $("#flip").click(function(){
        $("#panel").slideDown("slow");
    });
});
</script>
```

```
<style>
#panel, #flip {
    padding: 5px;
    text-align: center;
    background-color: #e5eecc;
    border: solid 1px
#c3c3c3;}
#panel {
    padding: 50px;
    display: none;
</style>
```

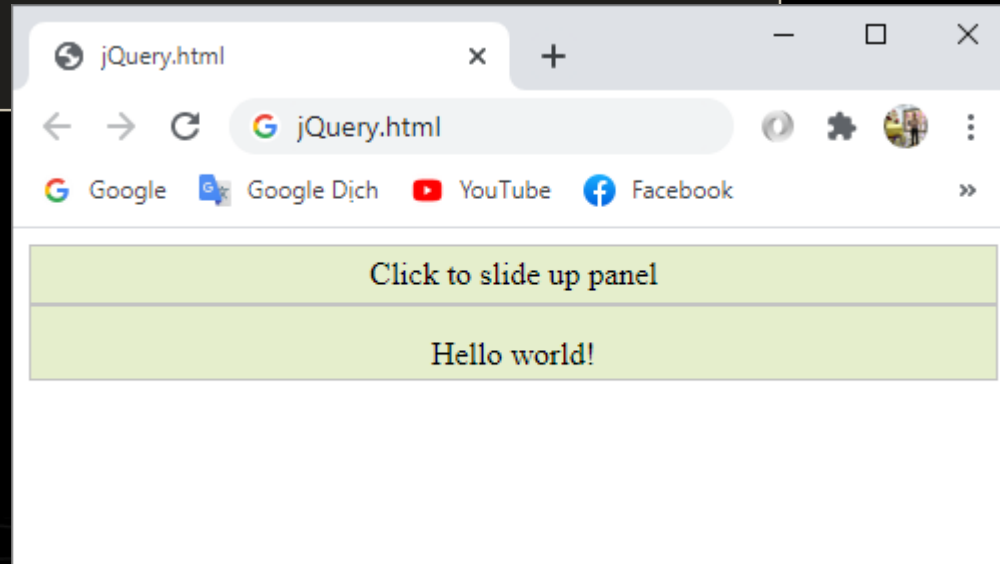


jQuery Effects – Sliding – slideUp()

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

```
<script>
$(document).ready(function(){
    $("#flip").click(function(){
        $("#panel").slideUp("slow");
    });
});
</script>
```

```
<style>
#panel, #flip {
    padding: 5px;
    text-align: center;
    background-color: #e5eccc;
    border: solid 1px
#c3c3c3;}
#panel {
    padding: 50px;}
</style>
```

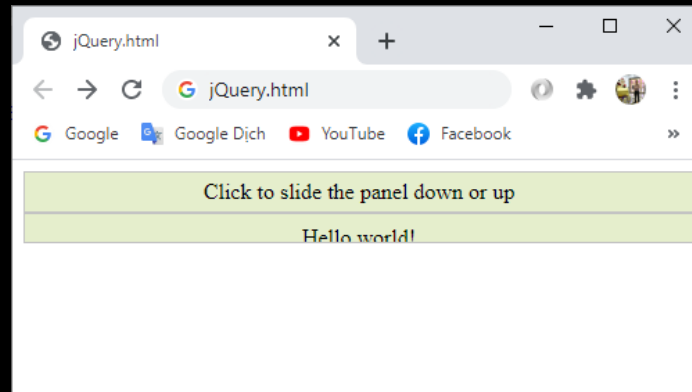
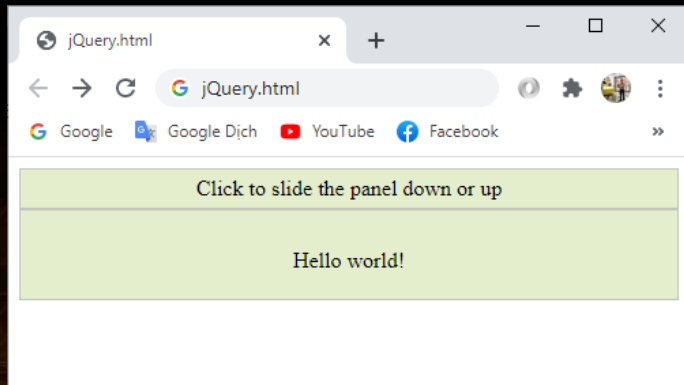


jQuery Effects – Sliding – slideToggle()

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

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



Down

Up

jQuery Effects - Animation

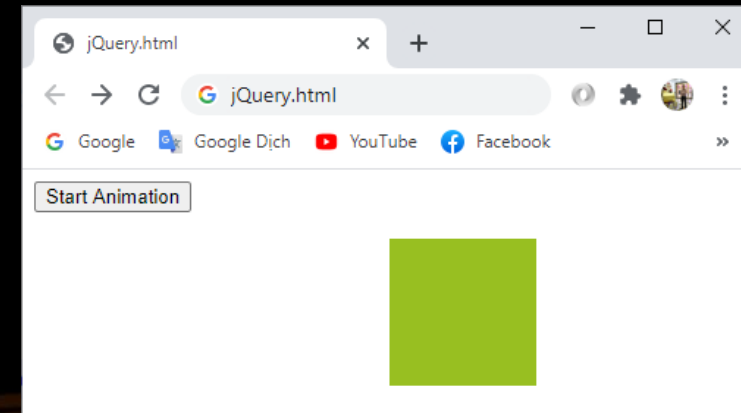
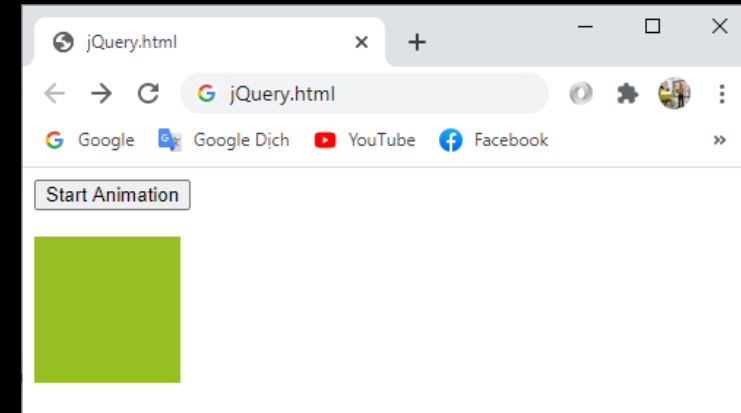
- With jQuery, you can create custom animations
- Syntax
 - `$(selector).animate({params},speed,callback);`

jQuery Effects – Animation - Example

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

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

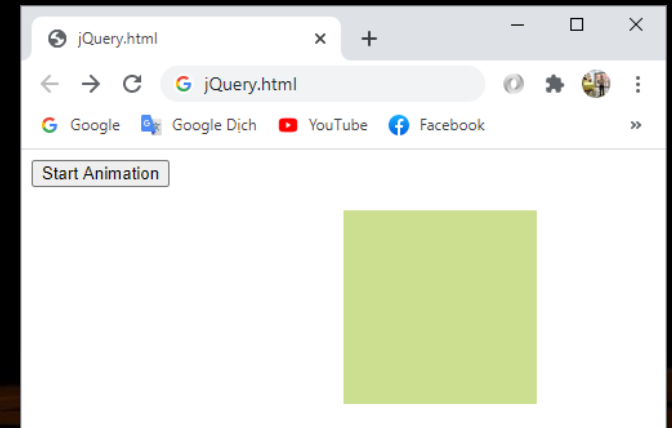
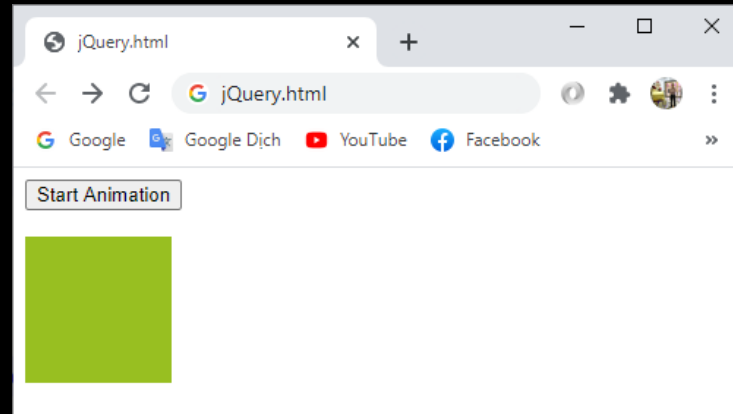
```
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("div").animate({left: '250px'});  
    });  
});  
</script>
```



jQuery Effects – Animation - Manipulate Multiple Properties

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

```
<script>
$(document).ready(function(){
    $("button").click(function(){
        $("div").animate({
            left: '250px',
            opacity: '0.5',
            height: '150px',
            width: '150px'
        });
    });
});
</script>
```

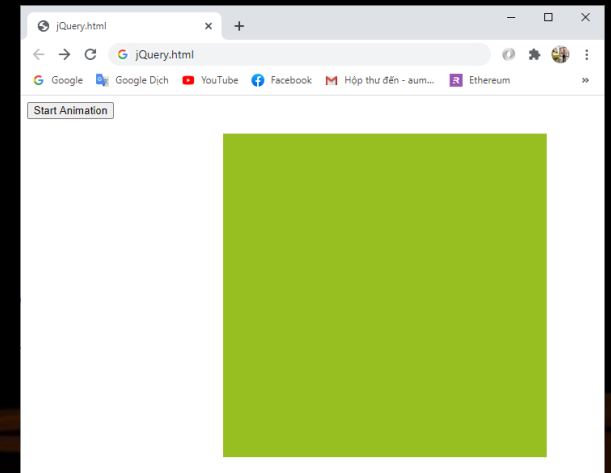
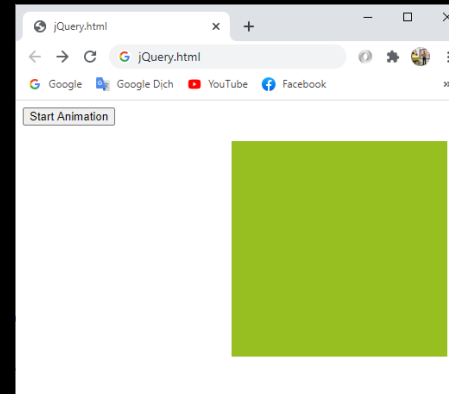
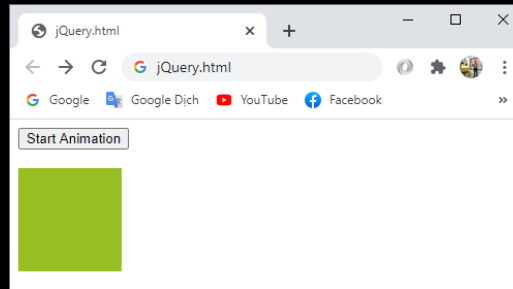


jQuery Effects – Animation - Using Relative Values

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

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

```
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("div").animate({  
            left: '250px',  
            height: '+=150px',  
            width: '+=150px'  
        });  
    });  
});  
</script>
```

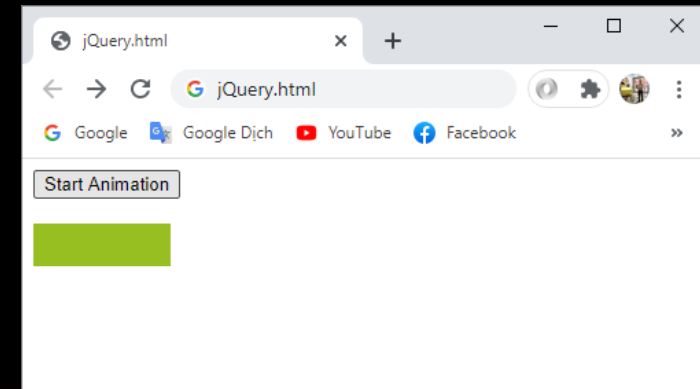
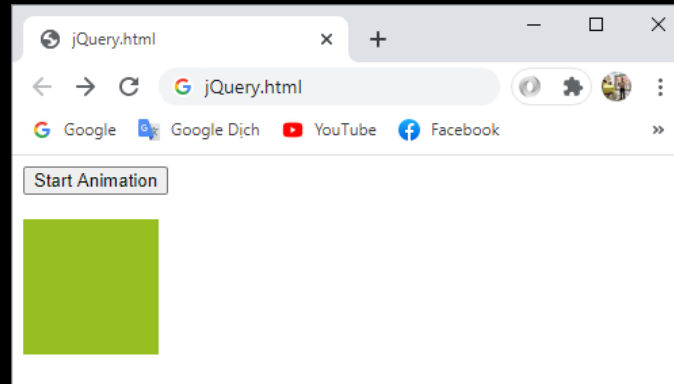


jQuery Effects – Animation - Using Pre-defined Values

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

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

```
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("div").animate({  
            height: 'toggle'  
        });  
    });  
});  
</script>
```



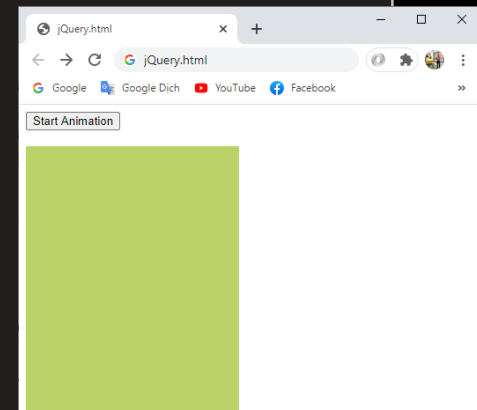
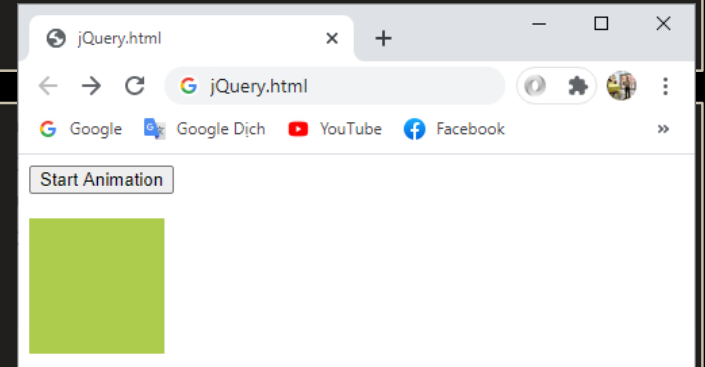
jQuery Effects – Animation - Uses Queue Functionality

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

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

```
<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>
```



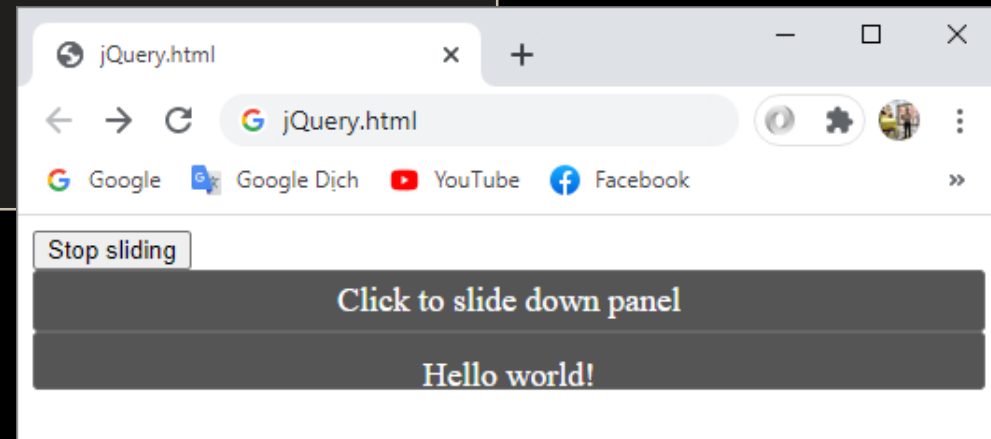
jQuery Effects - Stop Animations

- The jQuery stop() method is used to stop an animation or effect before it is finished.
- The stop() method works for all jQuery effect functions, including sliding, fading and custom animationsSyntax
- Syntax
 - `$(selector).stop(stopAll,goToEnd);`

jQuery Effects - Stop Animations - Example

```
<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>
```

```
<script>
$(document).ready(function(){
  $("#flip").click(function(){
    $("#panel").slideDown(5000);
  });
  $("#stop").click(function(){
    $("#panel").stop();
  });
});
</script>
```



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

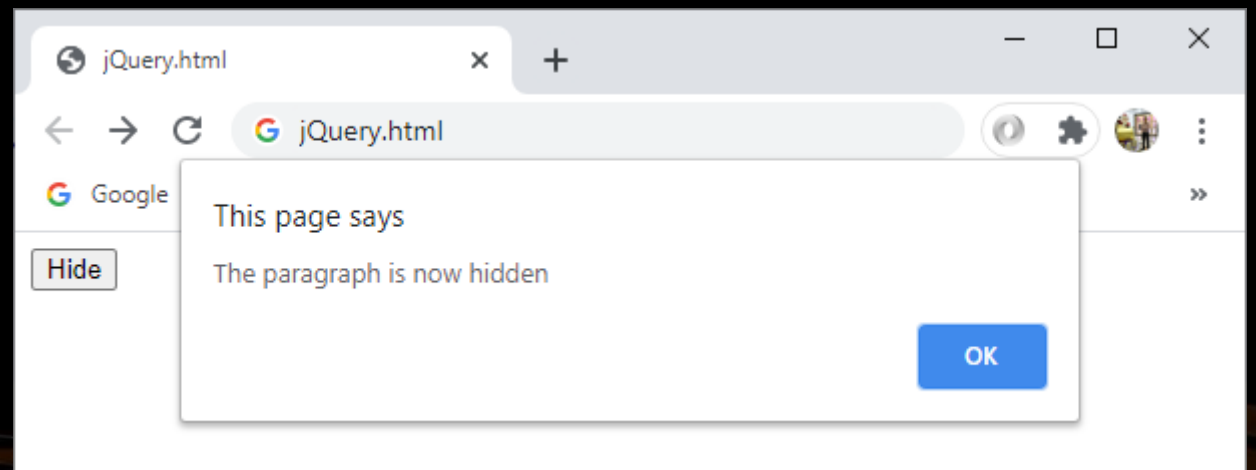
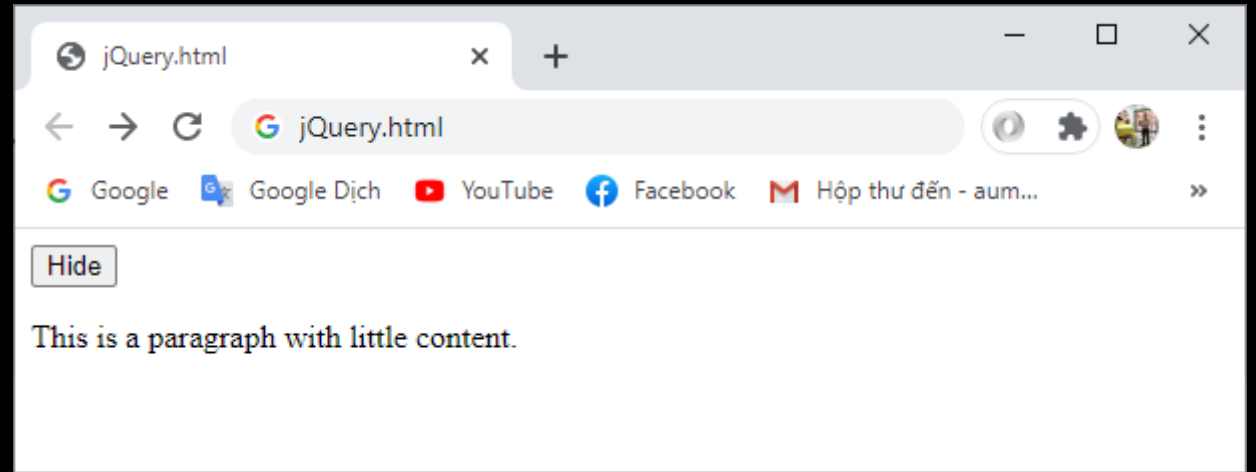
jQuery Effects - Callback Functions

- A callback function is executed after the current effect is 100% finished
- Syntax
 - `$(selector).hide(speed,callback);`

jQuery Effects - Callback Functions - Example

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

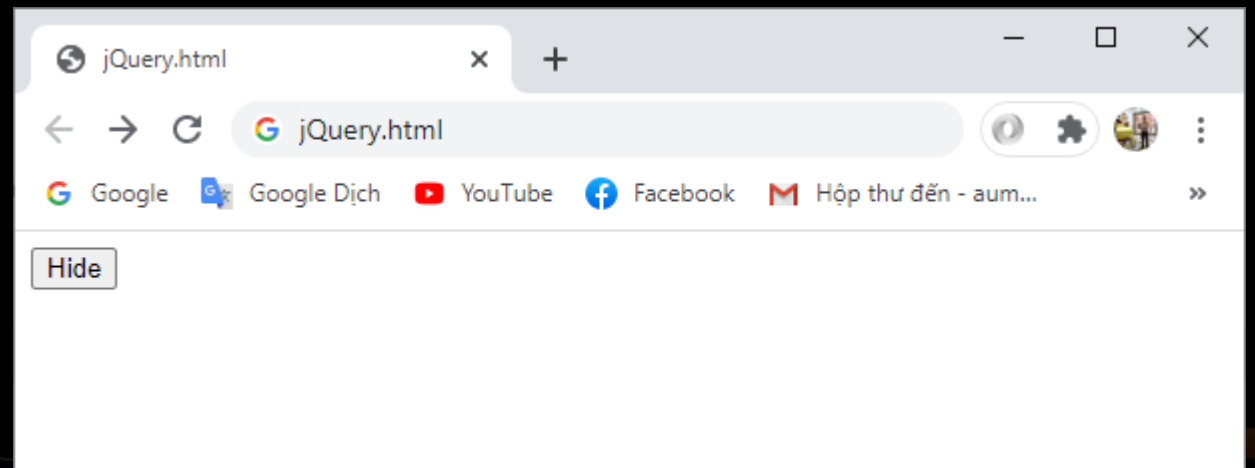
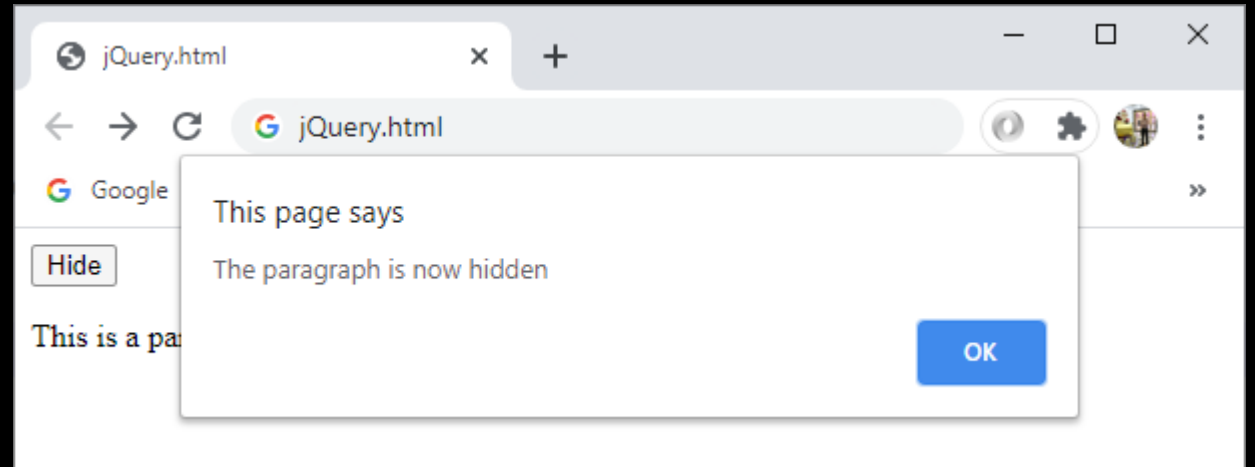
```
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("p").hide("slow",  
function(){  
            alert("The paragraph is  
now hidden");  
        });  
    });  
});  
</script>
```



jQuery Effects – Without Callback Functions – Example

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

```
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("p").hide(1000);  
        alert("The paragraph is now  
hidden");  
    });  
});  
</script>
```





Chaining Function Calls

Call After Call, After Call, ...

jQuery: Chaining Function Calls

- In programming , the "chaining" paradigm is as follows:
 - If a method should return result -> OK, return it
 - If a method should NOT return a result -> return **this**
- jQuery implements the "chaining" paradigm, so methods can be chained one after another:

```
$('#<button />').remove()  
  .addClass('btn-success')  
  .html('Click me for success')  
  .on('click', onSuccessButtonClick)  
  .appendTo(document.body);
```

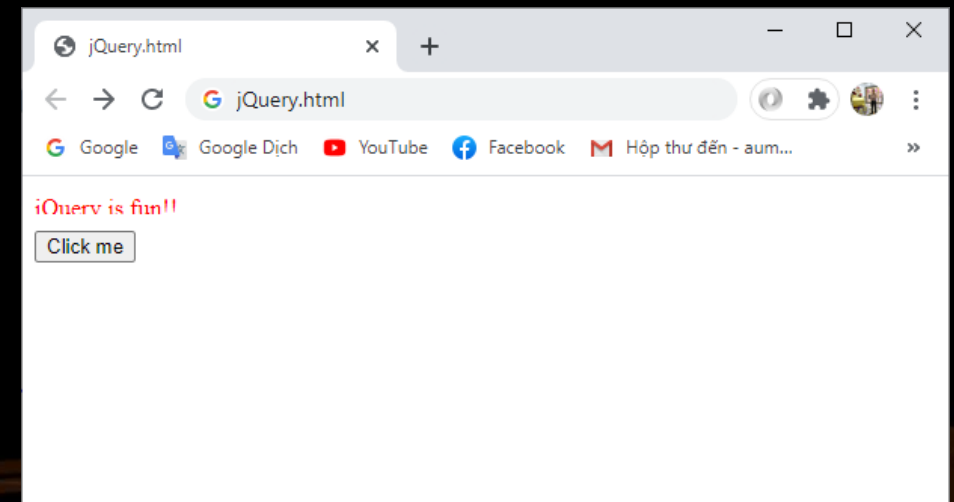
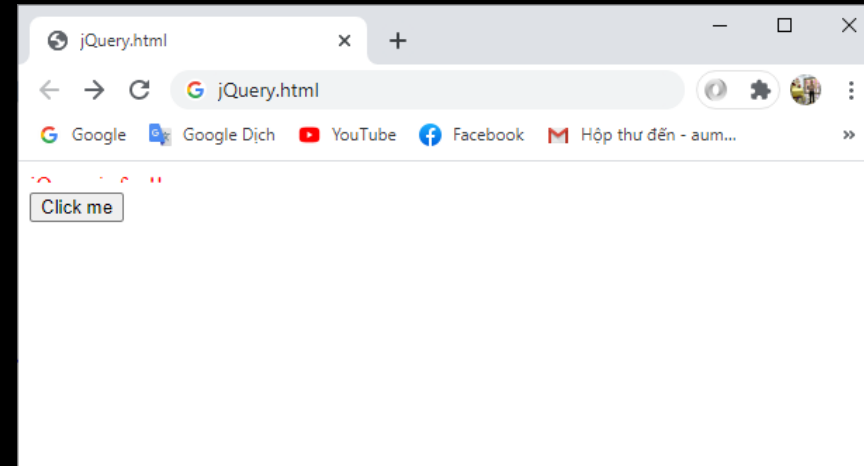
jQuery Effects - Chaining

- With jQuery, you can chain together actions/methods.
- Chaining allows us to run multiple jQuery methods (on the same element) within a single statement
- Example:
 - `$("#p1").css("color", "red").slideUp(2000).slideDown(2000);`

jQuery Effects – Chaining – Example

```
<p id="p1">jQuery is fun!!</p>  
<button>Click me</button>
```

```
<script>  
$(document).ready(function(){  
    $("button").click(function(){  
        $("#p1").css("color",  
"red").slideUp(2000).slideDown(2  
000);  
    });  
});  
</script>
```





jQuery Plugins

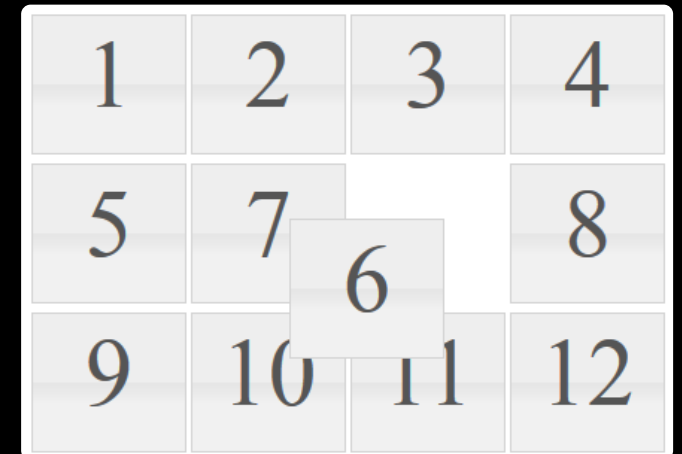
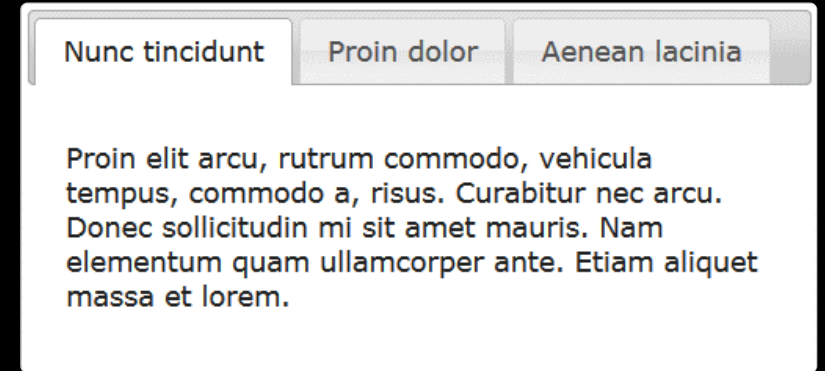
jQuery Plugins

- jQuery has many ready-to-use plugins
 - E.g. the **jQueryUI** library for UI controls
- Plugins for UI
 - Tabs – <https://jqueryui.com/tabs/>

```
$('#tabs-holder').tabs();
```

- Arrangeable elements (with drag and drop)
 - <https://jqueryui.com/sortable/#display-grid>

```
$('#grid').sortable();
```



Creating jQuery Plugins

```
(function($) {  
    $.fn.highlight = function(className) {  
        $(this).on("mouseover", function() {  
            $(this).addClass(className);  
        });  
        $(this).on("mouseout", function() {  
            $(this).removeClass(className);  
        });  
    }  
})(jQuery);
```

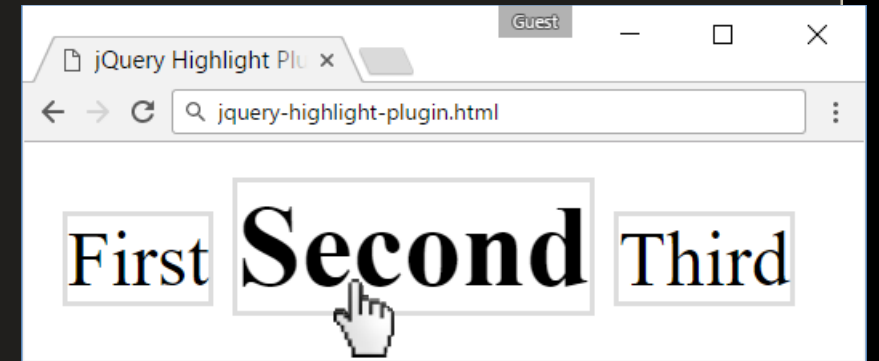
```
$(".item").highlight('big');
```


Using the Highlight jQuery Plugin

```
<style>
  .item { border: 1px solid #DDD }
  .big { font-size: 1.5em; font-weight: bold; }
</style>

<span class="item">First</span>
<span class="item">Second</span>
<span class="item">Third</span>

<script>$(".item").highlight('big');
</script>
```



Summary

- Effects
 - Hide/Show: `$(selector).hide/show(speed,callback);`
 - Fading: `fadeIn()`, `fadeOut()`, `fadeToggle()`, `fadeTo()`
 - Sliding: `slideDown()`, `slideUp()`, `slideToggle()`
 - Animation: `$(selector).animate({params},speed,callback);`
- Chaining function calls
- jQuery plugins



jQuery - Effects, Chaining function calls, jQuery Plugins



Questions?

