



# **JavaScript 2**

## **Lektion => 2**

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# **NACKADEMIN**

# Lektionstillfällets mål

## Mål med lektionen

- Manipulera CSS
- Händelser (events)
- Effekter
- Animeringar
- Traversing DOM
- Formulärvalidering
- **Att läsa: sid. 321–352**
- **Arbetsmetod**
  - Teori och praktik varvas under lektionen

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# Kort summering av föregående lektion

- Introduktion till jQuery
- Selektorer
- Caching
- Chaining
- Manipulera innehåll
- Infoga element
- Arbeta med attribut

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# Att sätta en CSS-egenskap

<p>Du kan sätta en CSS-egenskap med hjälp av metoden css().</p>

<button>Klicka här</button>

<script>

```
$("document").ready(function () {  
    $("button").click(function () {  
        $("p").css("background-color", "gold");  
    });  
});
```

</script>

Metoden css() sätter värdet "yellow" på egenskapen background-color på alla p-element

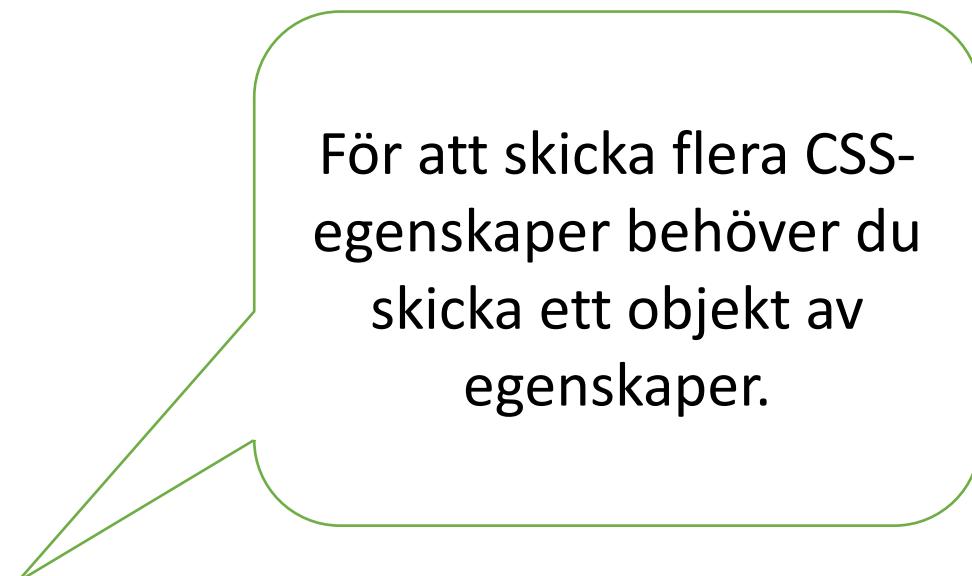
# Att sätta flera CSS-egenskaper

<p>Du kan sätta flera CSS-egenskaper med hjälp av metoden css().</p>

<button>Klicka här</button>

<script>

```
$("document").ready(function() {  
    $("button").click(function() {  
        $("p").css({  
            "color": "white",  
            "background-color": "#000"  
        });  
    });  
});
```



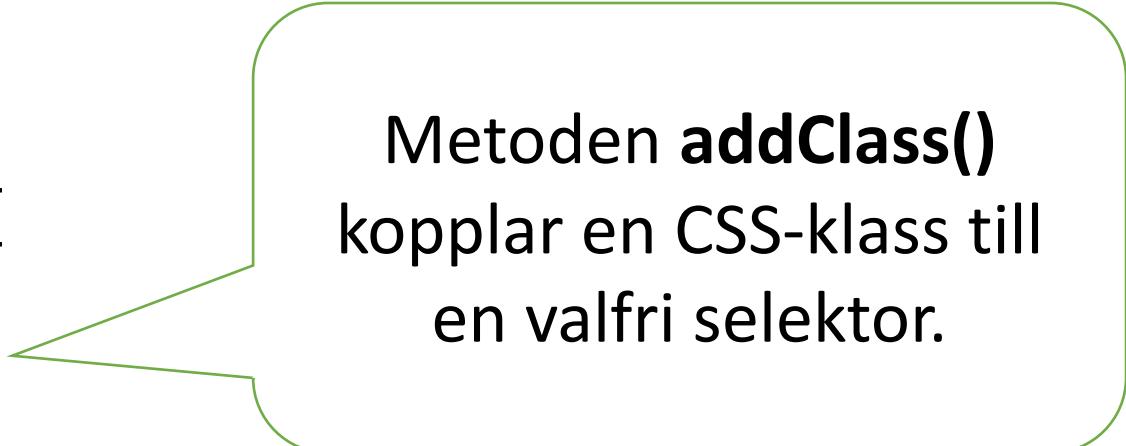
För att skicka flera CSS-egenskaper behöver du skicka ett objekt av egenskaper.

# Att hämta CSS-egenskaper

```
<p id="demo">Du kan hämta info om en CSS-egenskap  
med hjälp av metoden css().</p>  
<button>Klicka här</button>  
<script>  
$(document).ready(function () {  
    $("button").click(function () {  
        $("#demo").css("background-color", "gold");  
        console.log($("#demo").css("background-color"));  
    });  
});  
</script>
```

# Lägg till en CSS-Klass med addClass()

```
<style> .blue { color: blue; } </style>
</head> <body>
<p>Du kan lägga till en CSS-klass  
med hjälp av metoden addClass().</p>
<button>Klicka här</button>
<script>
$(document).ready(function() {
  $("button").click(function() {
    $("p").addClass("blue");
  });
});
</script>
```



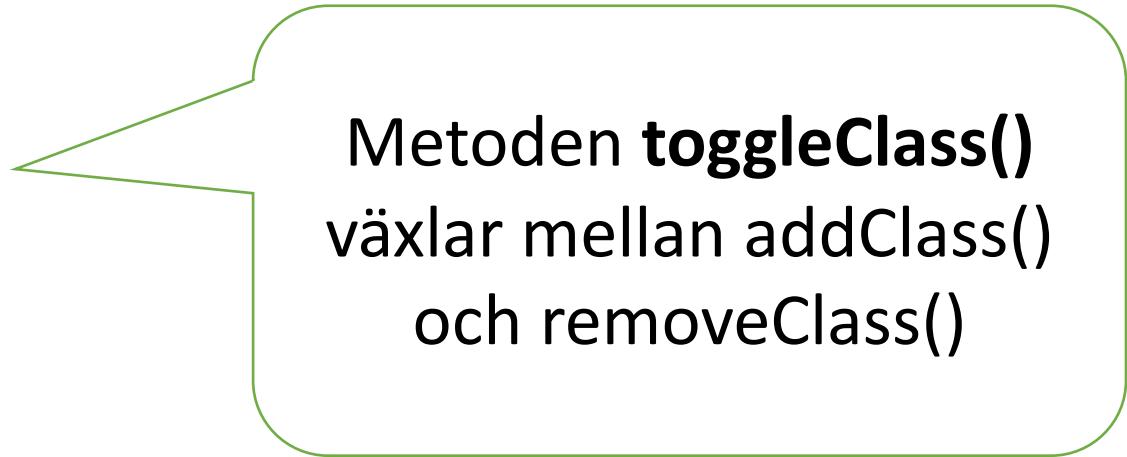
Metoden **addClass()**  
kopplar en CSS-klass till  
en valfri selektor.

# Ta bort en CSS-Klass med removeClass()

```
<style> .blue { color: blue; } </style>
</head> <body>
<p class="blue">Du kan ta bort en CSS-klass
med hjälp av metoden removeClass().</p>
<button>Klicka här</button>
<script>
$(document).ready(function() {
    $("button").click(function() {
        $("p").removeClass("blue");
    });
});
```

# Metoden toggleClass()

```
<style> .blue { color: blue; } </style>
</head> <body>
<p class="blue">Du kan växla mellan addClass och
removeClass
med hjälp av metoden toggleClass().</p>
<button>Klicka här</button>
<script>
$(document).ready(function() {
  $("button").click(function() {
    $("p").toggleClass("blue");
  });
});
</script>
```



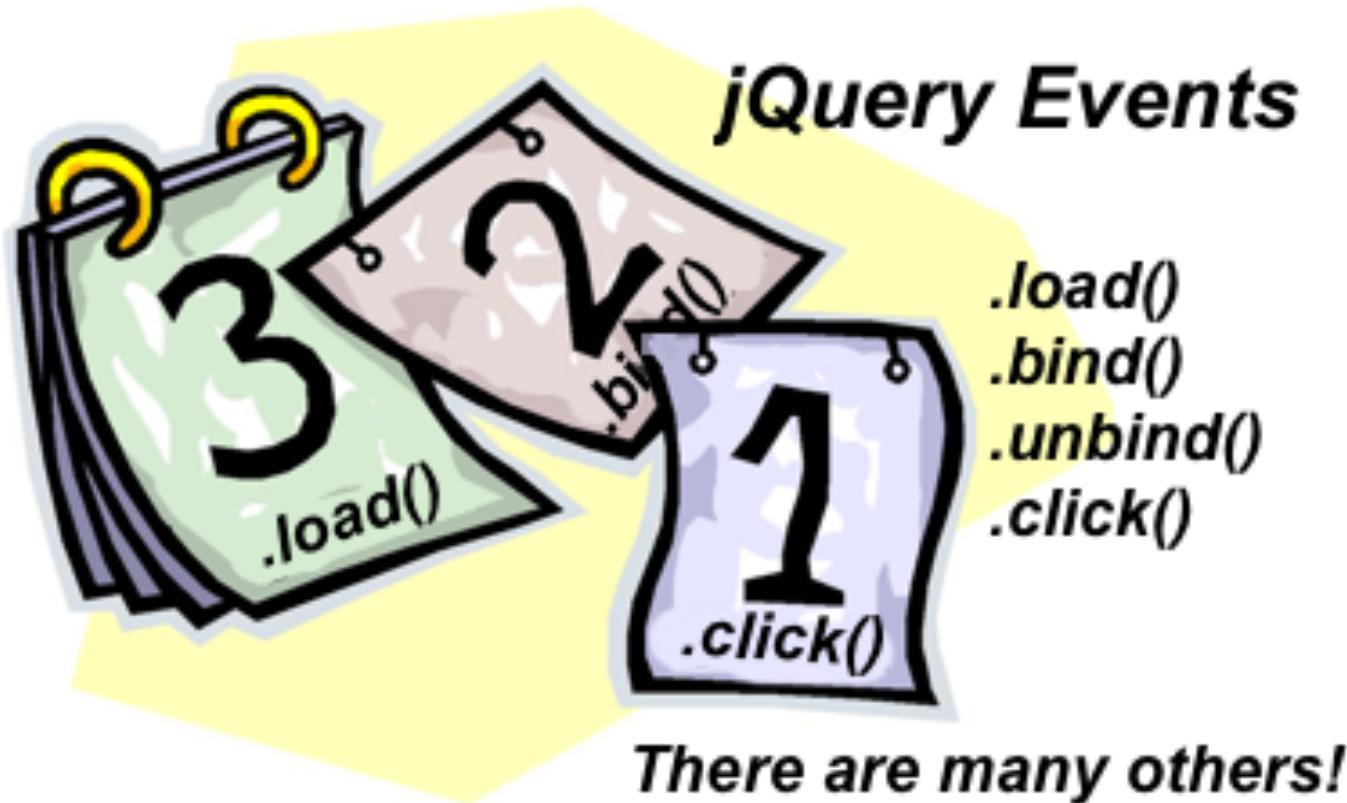
Metoden **toggleClass()**  
växlar mellan addClass()  
och removeClass()

# Att iterera över flera element med jQuery

```
<ul>
<li></li>
<li></li>
<li></li>
</ul>
<script>
$(document).ready(function() {
    $("li").each(function(index){
        $(this).append("Element " + index);
    });
});
</script>
```

Metoden **each()**  
itererar över alla  
<li>-element som finns  
i DOM-trädet.

# jQuery Events



Bildkälla: <https://blog.eduonix.com/web-programming-tutorials/jquery-objects-events/>

# Click och Dblclick

```
<h2 id="demo1">Klicka här</h2>
<h2 id="demo2">Dubbelklicka här</h2>
<script>
$(document).ready(function() {
  $("#demo1").click(function(){
    $(this).hide();
  });
  $("#demo2").dblclick(function(){
    $(this).hide();
  });
});
</script>
```

# Mouseenter och Mouseout

```
<h2 id="demo">Mouseenter och Mouseout</h2>
<script>
$(document).ready(function() {
    $("#demo").mouseenter(function(){
        $(this).html("Demo på mouseenter!");
    });
    $("#demo").mouseout(function(){
        $(this).html("Demo på mouseout!");
    });
});
</script>
```

# Mousedown och Mouseup

```
<h2 id="demo">mousedown och mouseup</h2>
<script>
$(document).ready(function() {
    $("#demo").mousedown(function(){
        $(this).html("Demo på mousedown!");
    });
    $("#demo").mouseup(function(){
        $(this).html("Demo på mouseup!");
    });
});
</script>
```

# Hover

```
<h2 id="demo">Hover demo</h2>
<script>
$(document).ready(function() {
  $("#demo").hover(inFunction, outFunction);
});
function inFunction() {
  $(this).css("background-color", "yellow");
}
function outFunction() {
  $(this).css("background-color", "pink");
}
</script>
```

# focus och blur

```
Namn <input type="text">
E-post <input type="text">
<script>
$(document).ready(function () {
    $("input").focus(function () {
        $(this).css("background-color", "gold");
    });
    $("input").blur(function () {
        $(this).css("background-color", "white");
    });
});
```

</script>

# Metoden on() – Exempel 1

```
<p>Click med metoden on()</p>
<script>
$(document).ready(function() {
    $("p").on("click", function() {
        $(this).html("click har aktiverats");
    });
}) ;
</script>
```

## Metoden on() – Exempel 2

```
$(document).ready(function() {  
    $("p")  
        .on("click", function() {  
            $(this).html("click har aktiverats");  
        })  
        .on("dblclick", function() {  
            $(this).html("dblclick har aktiverats");  
        });  
    });
```

# jQuery Effects

Show

Hide

Fade

Slide

# Show och hide

```
<button id="show">Visa</button>
<button id="hide">Dölj</button>
<p>Lorem ipsum dolor sit amet.</p>
<script>
$(document).ready(function () {
    $("#hide").click(function () {
        $("p").hide(300)
    });
    $("#show").click(function () {
        $("p").show(300)
    });
})</script>
```



Hastighet anges i  
millisekunder

# Toggle

```
<button id="demo">Visa</button>
<p style="display:none">Lorem ipsum dolor sit amet.</p>
<script>
$(document).ready(function () {
    $("#demo").click(function () {
        $("p").toggle(300);
        $(this).text(function (i, text) {
            return text == "Visa" ? "Dölj" : "Visa";
        })
    });
});
</script>
```

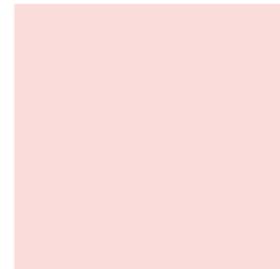
# jQuery Effects – Fading – demo

- [https://www.w3schools.com/jquery/jquery\\_fade.asp](https://www.w3schools.com/jquery/jquery_fade.asp)
- [https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_fadeto](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_fadeto)

```
$("button").click(function(){
    $("#div1").fadeTo("slow", 0.15);
    $("#div2").fadeTo("slow", 0.4);
    $("#div3").fadeTo("slow", 0.7);
});
```

Demonstrate fadeTo()

Click to fade boxes



# jQuery Effects – Sliding – demo

- [https://www.w3schools.com/jquery/jquery\\_slide.asp](https://www.w3schools.com/jquery/jquery_slide.asp)
- [https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_slide\\_toggle](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_slide_toggle)

Click to slide the panel down or up

Hello world!

# jQuery Animation – demo

[https://www.w3schools.com/jquery/jquery\\_animate.asp](https://www.w3schools.com/jquery/jquery_animate.asp)

[https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_animation1\\_toggle](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_animation1_toggle)

```
$("button").click(function(){
  $("div").animate({
    height: 'toggle'
  });
});
```

# jQuery Traversing DOM

## Traversing Up the DOM Tree

`parent()` `parents()` `parentsUntil()`

## Traversing Down the DOM Tree

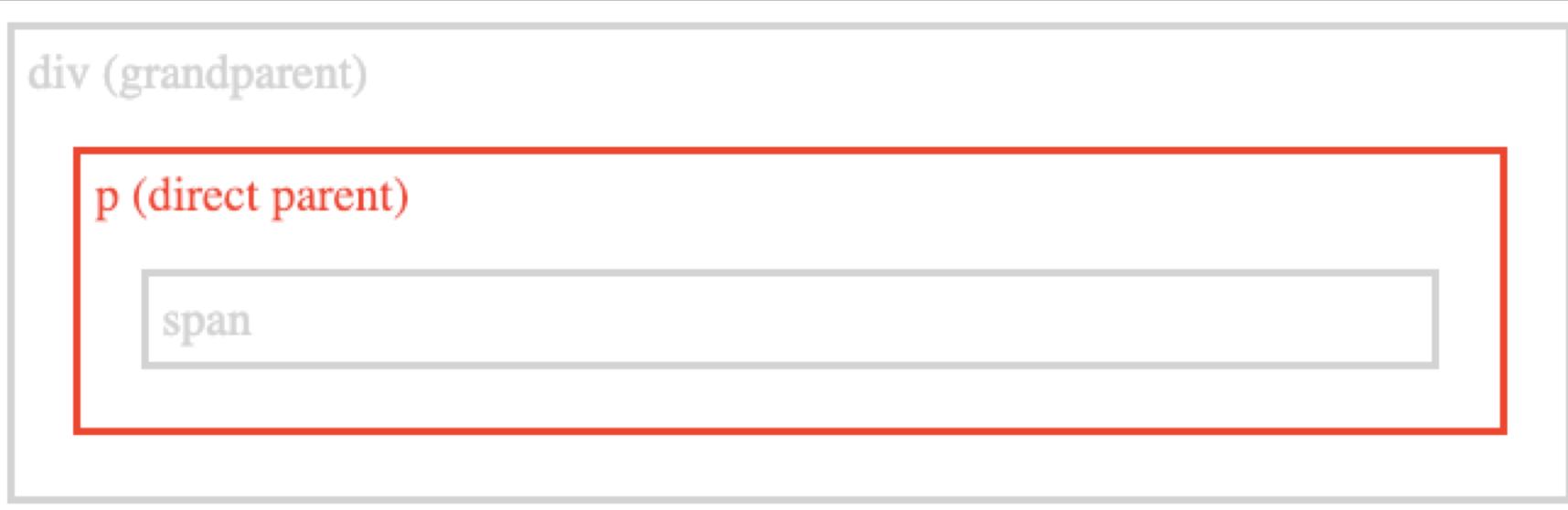
`children()`  
`find()`

## Traversing Sideways in The DOM Tree

`siblings()`  
`next()` `nextAll()` `nextUntil()`  
`prev()` `prevAll()` `prevUntil()`

# Traversing Up the DOM Tree

```
$("span").parent().css(  
  {"color": "red", "border": "2px solid red"}  
) ;
```



[https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_parent](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_parent)

# Traversing Down the DOM Tree – children()

```
$("div").children().css(  
  {"color": "red", "border": "2px solid red"}  
) ;
```

div (current element)

p (child)

span (grandchild)

# Traversing Down the DOM Tree – find()

```
$("div").find("span").css(  
  {"color": "red", "border": "2px solid red"}  
) ;
```

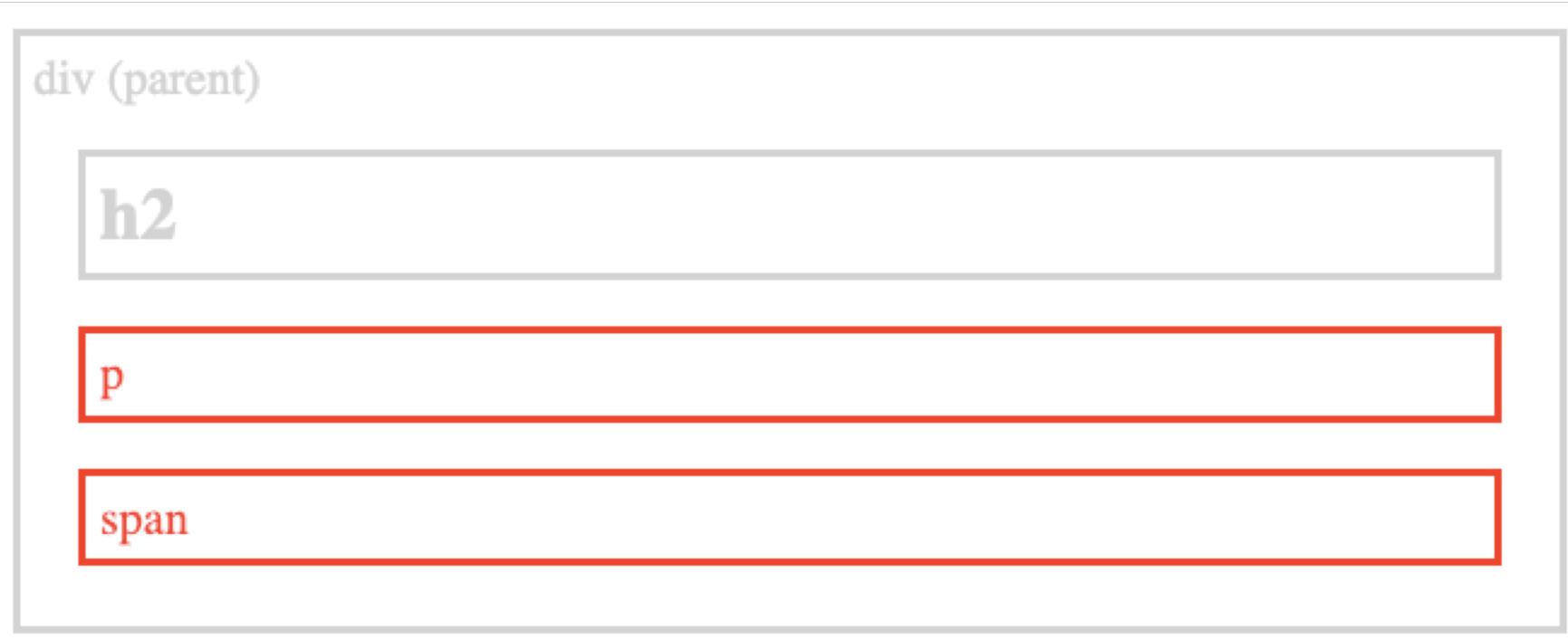
div (current element)

p (child)

span (grandchild)

# Traversing Sideways in The DOM Tree – siblings()

```
$("h2").siblings().css(  
  {"color": "red", "border": "2px solid red"}  
) ;
```



# Traversing Sideways in The DOM Tree – next()

```
$("h2").next().css(  
  {"color": "red", "border": "2px solid red"}  
) ;
```



# jQuery Traversing – Filtering

first()

last()

eq()

filter()

not()

# Filtering – first() – last() – eq()

```
$("div").first().css("background-color", "yellow");
```

The First Div

The Second Div

[https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_first](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_first)

[https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_last](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_last)

[https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_eq](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_eq)

# Filtering – filter() – not()

```
<p>My name is Donald.</p>
<p class="intro">I live in Duckburg.</p>
<p class="intro">I love Duckburg.</p>
<p>My best friend is Mickey.</p>
```

My name is Donald.

I live in Duckburg.

I love Duckburg.

My best friend is Mickey.

```
$( "p" ).filter( ".intro" ).css( "background-color", "yellow" );
```

[https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_filter](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_filter)  
[https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery\\_not](https://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_not)

# Ett praktiskt exempel – Formulärvalidering

**Username**

Ma

The username must be at least 3 characters.

**Password**

..

The password must be at least 3 characters.

Login

# Steg 1 – HTML

```
<form action="#">  
<div>  
  <label for="user"><b>Username</b></label> <br>  
  <input id="name" type="text" required> <br>  
  <span class="message">The username must be at least 3 characters.</span>  
</div>  
<div>  
  <label for="pass"><b>Password </b></label> <br>  
  <input id="pass" type="password" required> <br>  
  <span class="message">The password must be at least 3 characters.</span>  
</div>  
  <input type="submit" value="Login">  
</form>
```

## Steg 2 – CSS

```
<style>
  .message{
    color: red;
    display: none;
  }
</style>
```

# Steg 3 – JavaScript

Försök att lösa detta under ca 30 minuter

```
<script>  
$(document).ready(function(){  
  
    // 1. Välj inputfält som har attributet required  
    // 2. Vid blur testa om fältet innehåller minst 3 tecken  
    // 3. Visa meddelandet som ligger efter det aktuella fältet  
    // 4. Dölj meddelandet om fältet innehåller minst 3 tecken  
  
});  
</script>
```

# Övning



- Skapa ett valfritt formulär med ”jQuery Validation Plugin”.
- Gå till <https://jqueryvalidation.org>
- Läs dokumentationen och gå igenom videoklippen.
- Demo finns här
- <https://jqueryvalidation.org/files/demo/>

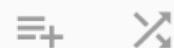
# Tips! Bra kurs om jQuery från Brad Traversy

[https://youtu.be/3nrLc\\_JOF7k](https://youtu.be/3nrLc_JOF7k)



## jQuery Crash Course

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# Summering av dagens lektion

- Vi har gått igenom grunderna i jQuery.
  - Manipulera CSS
  - Händelser (events)
  - Effekter
  - Animeringar
  - Traversing DOM
  - Formulärvalidering
- **Att läsa: sid. 321–352**
- Reflektioner kring dagens lektion?

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# Framåtblick inför nästa lektion

- Vi ska jobba med några jQuery Plugins
  - jQuery UI
  - Lightbox
  - Datatables