Agenda

- jQuery Basics
    - Actions
    - Selectors
    - Events
    - Effects
    - Ajax
- Plugins
- Tipps und warum jQuery so toll ist

Was ist jQuery?

?

Was ist jQuery?

Die etwas sinnvollere Antwort

- Die meistverwendete JavaScript Bibliothek
- jQuery bietet:
    - Elementselektion im DOM über die *Sizzle selector engine*
    - DOM-Manipulation
    - Erweitertes Event-System
    - Hilfsfunktionen
    - Effekte und Animationen
    - Ajax-Funktionalitäten
    - Plug-ins

Wie nutze ich jQuery?

```
<script type="text/javascript" src="jquery.js"></script>
```
Oder `<script src="http://ajax.googleapis.com/ajax/libs/jquery/1.5.2/jquery.min.js" type="text/javascript"></script>`

```
<script type="text/javascript">
      $(document).ready(function() {
            // put your awesome jQuery code here
      });
</script>
```

Auch asynchron möglich…

```
<script type="text/javascript" src="http://www.google.com/
jsapi"></script>


<script type="text/javascript">
google.load("jquery", "1.5.1");
google.setOnLoadCallback(function() {
        // your awesome jQuery code goes here
});
</script>
```

$

$

$(CSS Selector)

$(HTML)

$(DOM element)

```
$('')
$('table')
$('tr')
$('h2')
$('.parh')
$('#assembly')
```

Demo!

```
$(expression).action()
```

$ Traversing

- .children()
- .children(expression)
- .parent()
- .parent(expression)
- .find(expression)
- .filter(expression)
- .filter(function)
- .eq(index)
- .not(expression)
- .add(expression)
- .next() .prev()

- .nextAll() prevAll()
- .slice(start, end)
- .siblings()

- .end()

```
$('#assembly').next()
                .children()
$('#c').prevAll()
$('p').first()
$('p').filter('.parh')
```

Demo!

$ Manipulation

- .html(val)
- .text(val)
- .append(content)
- .appendTo(expression)
- .appendTo(jQuery object)
- .prependTo(expression)
- .prependTo(jQuery object)
- .after(content)
- .before()
- .wrap(html)
- .wrapAll(html)

- .empty()
- .remove()
- .remove(expression)

```
$('p').first().html('This paragraph is <string>awesome</strong>')
$('p').first().text('This paragraph is <string>awesome</strong>')
$('body').children().wrapAll('<div id="wrapper">')
```

Demo!

$ Selectors

- #id
- .class
- elementType
- :first
- :last
- :not(expression)
- parent > child
- :eq
- :even
- :odd
- :has(expression)
- :empty

- :hidden
- :visible
- [attribute]
- [attribute=value]
- [attribute!=value]
- [attribute*=value]

```
$('p').first() == $('p:first')
$('tbody>tr:first')
$('tr:odd')
$('a:not([href*="jquery.com"])')
```

Demo!

$ Attributes & CSS

- .attr(name, value)
- .attr(property)
- .removeAttr(name)
- .val(val)
- .prop(property)
- .css(name, value)
- .addClass()
- .removeClass()

```
$('a:last').attr('href')
$('tr:odd').css('background-color','red')
$('#c td').eq('2').css
({backgroundColor:'red',color:'orange'})
```

Demo!

$ Misc

- .html()
- .text()
- .val()
- .attr(name)
- .css(name)
- .width()
- .height()
- .position()
- .offset()
- .is(expression)
- .has()

```
$('table').html()
          .text()
$('p:first').offset().left()
```

Demo!

```
$(expression).action1().action2();
```

```
$('#assembly > th')
    .text('assembly')
    .parent()
    .css('background-color','purple')
    .end()
    .append('nice')
```

Demo!

Binding

```
document. document.getElementsByTagName('button')[0].onclick =
function(event) {

      alert('Hello World!');

}
```

jQuery like

```
$('button').bind('click',function(){

      alert('Hello World!');

});
```

Shortcut

```
$('button').click(function(){

      alert('Hello World!');

});
```

$ Events

- click
- mouseover
- mouseout
- mouseenter
- mouseleave
- mousemove
- hover
- blur
- change
- select
- dblcklick
- focus

- keydown
- keyup
- scroll
- resize
- load
- ready

```
$('#assembly').bind('mouseenter',function(){$(this).css('background-
color','orange'); })
$('tr').bind('mouseenter',function(){$(this).css('background-
color','orange'); })
$('tr').bind('mouseenter',function(){$(this).css('background-
color','orange'); }).bind('mouseleave',function(){$(this).css('background-
color','white'); })
```

Demo!

Effects

```
$(expression).function();
$(expression).function(speed);
$(expression).function(speed, callback);
```

Callbacks

```
$('a').hide(slow);
alert("fertig");


Besser:
$('a').hide(slow,function() {
      alert("fertig");
})
```

$ Effects

- show
- hide
- toggle
- slideUp
- slideDown
- slideToggle
- fadeIn
- fadeOut
- fadeTo
- highlight

```
$('p:first').hide()
$('p:nth(2)').hide('slow')
$('p:nth(3)').slideToggle('slow')
$('table').fadeOut(2000)
$('td').add('th').mouseenter(function(){$(this).fadeOut()})
```

Demo!

mehr Effekte

```
.animate(properties, speed, easing, callback)
```

```
$('p:first')
    .css({position:'absolute', top:$('p:first').position().top, left:$
    ('p:first').position().left})
    .animate({top:600, left:200},4000,'linear',function(){alert("I'm
    done");})
```

Demo!

```
$(selector).load(url, data, callback);
$.post(url, data, callback)
$.get(url, data, callback)
$.getJSON(url, data, callback)
$.ajax(url, options)
```

$.ajax options

- data

- type　　　　　(POST | GET)

- dataType　　　(xml | html | script | json | jsonp| text)

- error

- cache

- …

global

- ajaxStart
- ajaxSend
- ajaxSuccess
- ajaxError

local

```
$ajax({
    eventName: function() {
        ...
    }
})
```

- beforeSend
- success
- error
- complete

Demo!

```
$('p:first').load('data.txt', {}, function() { alert('done'); })
$('table').load('data.txt')
$('table').load('data.txt').css('background-color','blue')

$.ajax({
    url:'data.json',
    dataType:'JSON',
    type:'GET',
    success:function(data){
        items = data.menu.items
        $('p:first').html('');
        for (i in items) {
            $('p:first').append(items[i].id).append('<br>');
        }
    }
})

$('#loader').ajaxStart(function() {$(this).fadeIn
(200)}).ajaxSuccess(function(){$(this).fadeOut(2000)})
```

Fragen?

Plugins – do more

- erweitert jQuery.fn

```
(function( $ ){
    $.fn.myPlugin = function() {
        this.each(function(){
            // Do your awesome plugin stuff here
        }
    };
})( jQuery );
```

```
$('#liste').zipper()
```

Demo!

Praktische Tipps/ Referenzen

- jQuery mit anderen Bibliotheken

```
(function($) {
    // awesome jQuery goes here
})(jQuery);
```

- Teilweise ist jQuery **nicht rückwärtskompatibel**
- Bei Animationen Callbacks benutzen
- die jQuery Doku ist klasse!
  - http://docs.jquery.com/
  - http://api.jquery.com/
- http://www.youtube.com/watch?v=8mwKq7_JlS8