

Advanced JavaScript

Part 2

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1. Agenda

1. Introduction to JQuery
2. The six core functions of JQuery
3. Benefits of JQuery
4. Introduction to NPM
5. `$()` and `jQuery()`

1. Introduction to JQuery

- Is a JavaScript library
 - Not a framework
- Automates a bunch of common VanillaJS tasks
 - „1 Line of Code“
- 10 years old
- Cross-Browser Functionality

1. Introduction to JQuery



1. Introduction to JQuery



2. Six Core Functions

1. Access DOM elements

`$('div')`

-> access all DIV elements on the page

2. Six Core Functions

2. Modify the appearance of a page

```
$('div').addClass('highlight');
```

-> add class highlight to all divs

```
$('div').removeClass('highlight');
```

-> remove class highlight from all divs

2. Six Core Functions

3. Alter the content of a page

```
$('div').append('<div>Hallo World</div>');
```

-> adds a div with Hallo World to all divs

2. Six Core Functions

4. Animate web page changes

```
$('#div').fadeOut();
```

-> each div on the page fades out and disappears

```
$('#div').slideUp();
```

-> each div on the page slides up and disappears

2. Six Core Functions

5. Retrieve data from the server

```
$('div').load('content.html');
```

-> loads the content of an HTML files into a div

2. Six Core Functions

6. Respond to user interaction

```
$('#div').click( function() {  
    alert('Hallo World');  
});
```

-> when clicking on any div, alert Hallo World

3. Benefits of JQuery

1. Minimal Code

- JQuery operates on **sets of elements**

2. Large Library

- Wide variety of inventive and useful modules

3. Strong community

- Stack Overflow = Your new best friend

4. Cross-Browser Support

- Chrome, Firefox, IE, Safari

5. AJAX Support

- Easier than in VanillaJS

3. Benefits of JQuery

- Biggest benefit:

Everybody uses it.

4. Introduction to NPM

- NPM = **Node Package Manager**
 - Manages (Mainly Installs and Removes) packages for **NodeJS** applications
- NodeJS = Serverside JavaScript
 - More on that later ...
- Let us install watch-http-server
sudo npm install -g watch-http-server

5. `$()` and `jQuery()`

- `$()` is a synonym for `jQuery()`
- `$()` or `jQuery()`
 - selects a DOM element
 - wraps jQuery functionality around it
 - returns it

5. \$() and jQuery()

- \$() is a synonym for jQuery()
- \$() or jQuery()
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 - returns it
- **It is not the native JavaScript Object for DOM**