

# Multimedia im Netz (Online Multimedia)

Wintersemester 2014/15

Übung 09 (Nebenfach)



# Today's Agenda

- Spot the error!
- jQuery Repetition
- AJAX with jQuery
- Discussion of assignment 08

# Spot the Error!

- `var content = $('#myDiv').html();`
- `$('#span').addClass('someClass');`
- `$('#li').each({  
 $(this).css('color','red');`  
});
- `$('#<ul />').find('<li />').click(function(e){  
 e.preventDefault();  
});`

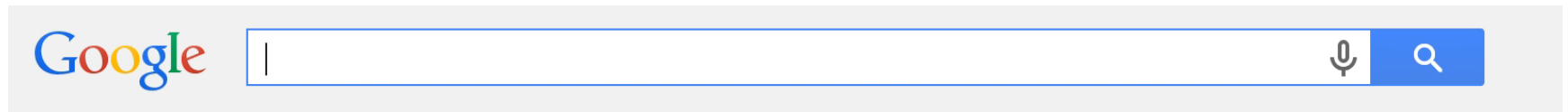
# jQuery

- What does the \$ stand for in jQuery?
- What is a „selector“?
- What is „DOM-Manipulation“ good for?
- What is a callback function?
- How do you handle a „click“ event?
- What is returned by `$( 'div' );`

# AJAX

- **A**synchronous **J**avaScript **a**nd **X**ML
- Builds on existing standards (XMLHttpRequest)
- Content can be loaded after the page is shown.
- Increases dynamics of a website
  
- Advantage: Page does not have to be reloaded
- Most popular websites are built with AJAX technologies, e.g. Facebook, Google, Twitter,

# Example: Google Instant Search



# AJAX with jQuery

- jQuery offers different functions to create AJAX-requests:
  - \$.ajax()
  - \$.get()
  - \$.post()
- More detailed information:
  - <https://api.jquery.com/jquery.ajax/>
  - <https://api.jquery.com/jquery.get/>
  - <https://api.jquery.com/jquery.post/>

# \$.ajax(url [, settings])

- **url:**  
String holding the URL to which the request is sent
- **settings:**  
Optional settings as key/value pairs.  
The most commonly used settings are:
  - **Type:** type of the request (either **'post'** or **'get'**)
  - **Data:** data that are sent (e.g. form data)
  - **dataType:** the result data type that we expect. jQuery automatically guesses if this key is missing.  
(e.g. text, xml, html, ...)
  - **Success:** callback function that is called once the request is done



# AJAX with an XML file

```
<div id="result"></div>
<script>
    $.ajax({
        url: "example.xml",
        type: "GET",
        dataType: "xml",
        success: function(d) {
            $(d).find("example").each(function() {
                var id = $(this).attr("id");
                var text = $(this).text();
                $("#result").append(
                    "<div>" + id + ": "
                    + text + "</div>"
                );
            });
        }
    });
</script>
```

# Example: JavaScript & PHP

- We're going to show you how to make requests to PHP scripts with AJAX
- Use case: A user fills out a form that is sent to a PHP script using jQuery AJAX methods. The response is then displayed to the user.
- There are 2 components:
  - HTML File (includes the JavaScript part)
  - PHP Script that processes a POST request

# HTML Boilerplate - Form

```
<!DOCTYPE html>
<html>
<head>
  <title></title>
  <script type="text/javascript"
    src="http://code.jquery.com/jquery-1.10.2.min.js"></script>
  <script>
    //JS Code
  </script>
</head>
<body>

<form id="form">
  <label for="firstname">First name: </label>
  <input id="firstname" type="text" name="first" required /><br/>
  <label for="nname">Last name: </label>
  <input id="nname" type="text" name="last" required /> <br/>
  <input type="submit" value="Submit" />
</form>

<div id="result"></div>

</body>
</html>
```

# AJAX Request: Key/Value Parameters

```
$(document).ready(function() {  
    function formSubmitHandler(event) {  
        event.preventDefault();  
        var firstname = $("#firstname").val();  
        var lastname = $("#lastname").val();  
  
        $.ajax({  
            url: "script.php",  
            type: "POST",  
            data: {firstname: firstname, lastname: lastname},  
            dataType: "text",  
            success: function(data) {  
                $("#result").html(data);  
            }  
        });  
    }  
    $("#form").submit(formSubmitHandler);  
});
```

# Back end PHP script

```
<?php
```

```
    $firstname = $_POST['firstname'];  
    $lastname = $_POST['lastname'];
```

```
    echo "First name: " . $firstname;
```

```
    echo "<br/>";
```

```
    echo "Last Name: " . $lastname;
```

```
?>
```

# Assignment 9

- **Topic: City Search with jQuery AJAX**
- **Due in: 4 Weeks**
- **Due date: 12.01.2015 16:00h**

**Thanks!**

**What are your questions?**