# 05 – jQuery

//// Design of Distributed Systems
//////////////////////////////////////

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# 1 Repetition

# What you should already know:

**# CSS**

**# ECMAScript (JavaScript)**

**# DOM**

**# XHR**

# Are there any Questions concerning

# **# Assignemtn 4 ?**

## Guestbook

**Heribert:** Hallo (X)
**Heribert2:** Hallo Welt (X)
**Bernd Wiesacher:** Hallo ihr alle (X)
**Bernd Wiesacher:** Ich konnte wegen Verspätung der Straßenbahn einen wichtigen Termin nicht

# 2

# JavaScript helpers

# Motivation

Instead of writing

<span style="color:red">document.getElementById("id").innerHTML</span>

you could state something like

<span style="color:green">$("#id").html()</span>

# Motivation

Instead of writing

<span style="color:red">document.getElementById("id").style.fontFamily = "Arial"</span>

you could state something like

<span style="color:green">$("#id").css("font-family", "Arial")</span>

# Motivation

Instead of writing

```
var xhttp = new XMLHttpRequest();
xhttp.onreadystatechange = function() {
    if (this.readyState == 4 && this.status == 200)
        document.getElementById("id").innerHTML
                                      = this.responseText;
};
xhttp.open("GET", "data.xml", true);
xhttp.send();
```

you could state something like

```
$.get("data.xml", data => $("#id").html(data))
```

# Motivation

## Instead of writing

```
if (document.addEventListener) {
    // For all major browsers, except IE 8 and earlier
    document.getElementById("id").addEventListener("click", myFunction);
} else if (document.attachEvent) {
    // For IE 8 and earlier versions
    document.getElementById("id").attachEvent("onclick", myFunction);
}
```

## you could state something like

```
$("#id").on("click", myFunction)
```

# Motivation

## And do stuff like

```
$("#id").animate({ opacity: 0.5, height: "50%" }

$("#myform").validate(options);

$("div").on("swipe", function(){
    // do something
});
```

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A lot of JavaScript libraries and frameworks exist

**#** *jQuery*

**#** **AngularJS**

**#** **ReactJS**

**#** **KnockoutJS**

**...**

# In order to build a website, you need knowledge in...

| | |
|---|---|
| **Marketing** | SEO     SEM     Support |
| **Design** | UI/UIX Design   Responsive   Photoshop |
| **Client-Side Code** | HTML5  CSS  JavaScript  XML |
| **Browser** | Bootstrap  jQuery  AngularJS  Cordova<br>IE, Chrome, Firefox  DOM  AJAX  MobileDev |
| **Server-Side Code** | Webservices  Architecture  OOP<br>PHP  ASP.NET  Java  Python  nodeJS |
| **Web Server** | Sockets  Load Balancing  Caching<br>Apache  IIS  Security  Protocols |
| **Databases** | MySQL  MS SQL  Oracle  NoSQL |
| **OS** | Linux  Windows Server  Storage<br>Routing  DNS  Devices |
| **Management** | Tooling  Documentation<br>Git / SVN |

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# 3

# jQuery

# jQuery is

- (still) the most often used JavaScript library; MIT license
- jQuery Core offers a large set of helper methods for DOM navigation and manipulation
- Lots of plugins and extensions

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# jQuery

- Exists in 3 different versions, which are only loosely cross-compatible
  - V1.12.4
  - V2.2.4
  - V3.1.1
- Separate projects such as
  - jQuery UI
  - jQuery Mobile

# 4

# Lets code…

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# Thank You!

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