



Web™

A journey into the wonderful
world of Web Technologies

Fundamentals

- *Markup*
- *Styling*
- *Interaction*
- *Data Storage*
- *Transport*

<HTML>

Markup

</HTML>

Tags

Tables

Hyper Links

Elements

href

<script>

<p>

<style>

Attributes

DOCTYPE

<param>

Lists

<pre>

href

meta

<frameset>

Images

ISO-8859-1

Tables

<canvas>

IFrames

<video>

<p>

<label>

<title>

<frameset>

meta

Images

<h1>

Elements

Lists

ISO-8859-1

<title>

<canvas>

<label>

<param>

<video>

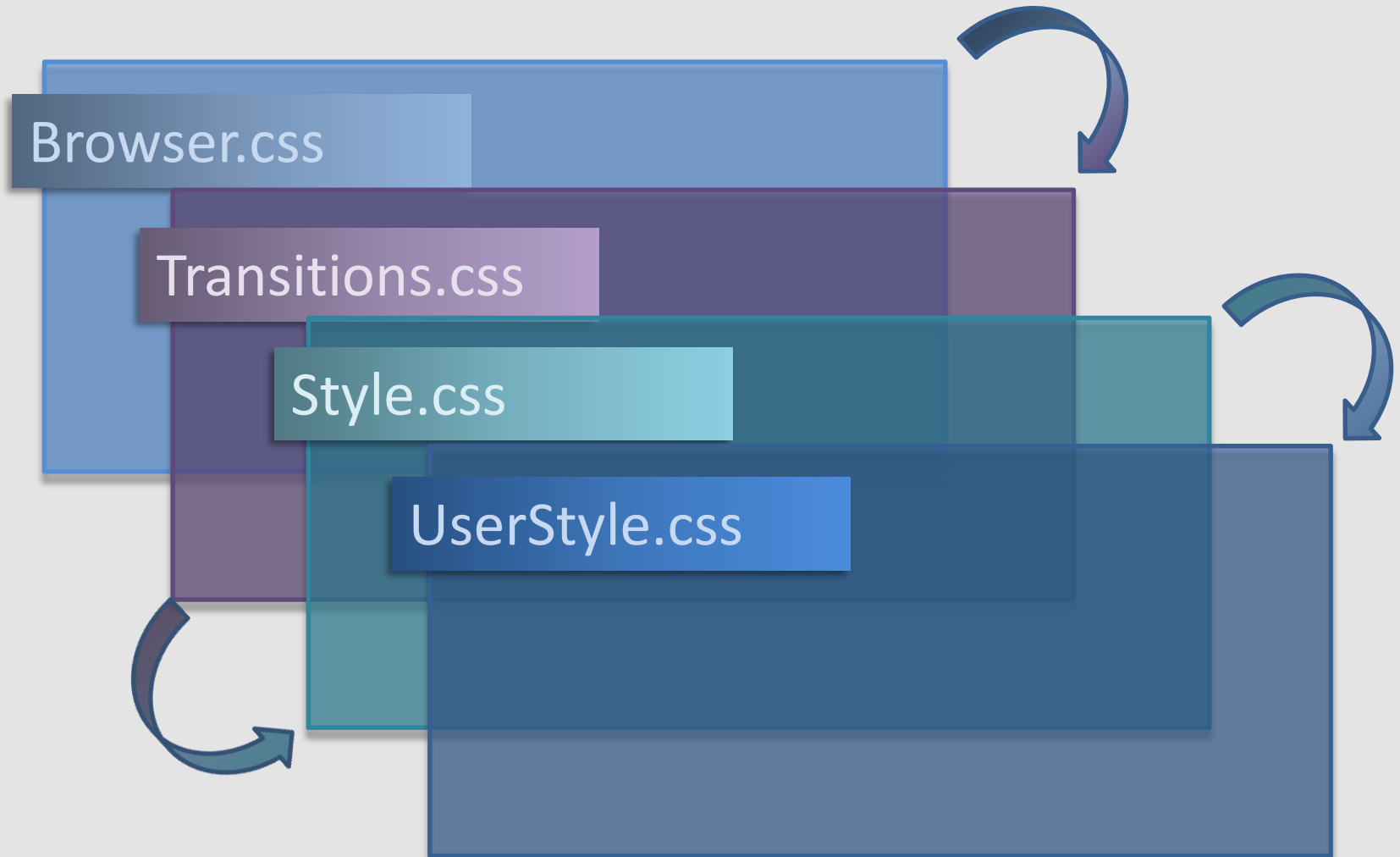
DOCTYPE

<body>

Attributes

Tags

Cascading Style Sheets



Styling

- Text/Fonts
- Formatting

Box Model

- Positioning
- Inheritance

Advanced

- Display
- Pseudo Classes

```
width: 800px;
margin: 0 auto;

#header {
  height: 90px;
  position: relative;
}
```

```
#home_content {
  height: 228px;
  position: relative;
}
```

```
#feature {
  margin-bottom: 20px;
  clear: both;
}
```

```
#feature .features {
  width: 550px;
  height: 250px;
  float: right;
}
```

```
color: #696969;
font-weight: bold;
margin-top: 0;
font-family: Arial;
```

```
h2 { color: #696969;
font-weight: bold;
font-family: Arial;
```

```
<style type="text/css">
```

```
div.ListViewContainer {
  width: 600px; /* Table width will be 99% of this */
  height: 300px; /* Must be greater than tbody */
  overflow: auto;
}
```

```
table {
  width: 99%; /* 100% of container produces horizontal scroll in Mozilla */
  border: none;
}
```

```
table>tbody { /* Child selector syntax which IE6 and older do not support */
  overflow: auto;
  height: 200px;
  overflow-x: hidden;
}
```

```
relative;
position: absolute; top: expression(offsetParent.scrollTop); /* For IE5+ only */
```

```
background-color: #CCCCCC;
font-weight: bold;
```

```
td {
  background-color: #000000;
  text-align: left;
```

```
table tfoot tr {
  position: relative;
  overflow-x: hidden;
  top: expression(offsetParent.scrollTop + offsetParent.offsetHeight);
}
```

```
tfoot td {
  background-color: #000000;
}
```

```
<html>
<head>
<title>CSCC - Common Sense Code Completion
<meta name="description" content="browser
<link type="text/css" rel="stylesheet" href="/style
<script type="text/javascript" src="/script.js"></script>
<style>
  body {
    margin: 20px;
    font-family: Segoe UI;
    font-size: 1.2em;
  }
  button {
    white-space: nowrap;
  }
</style>
```

```
td:last-child { /* Prevent Mozilla scrollbar from hiding cell content */
  padding-right: 20px;
}
```

<script>

document.getElementById("demo").inner

HTML=" **JavaScript** ");

</script>

- ECMAScript-262 edition 5; JavaScript 1.8.5
- Weakly typed
- Client-side only
- C style linguistics, Scheme/Self like design.
- Functions -> first-class citizens
- DOM Manipulation
- Storage via cookies 😊



✓ Moving stuff around

✓ Graceful degradation

✓ Accessibility

✓ Input Validation

✓ Libraries galore — *jQuery, Skeleton, Prototype,*
MooTools, YUI, D3, Raphaël,
Processing, Paper, yada-yada-yada...

✓ Gaming @ 10ms FRR *oh? yeah !!*

The *fun* part...



- ***PHP Hypertext Pre-processor***
- Prettify your HTML !!
- On-the-fly page generation
- Graphs, images, charts, data...
- URL Manipulation
- PHP+JS = State-ful pages 😊



- GUI Apps : WinBinder, php-gtk
 - SQLite : Server-*less* data
- **C**ompletely **A**utomated **P**ublic **T**uring test to tell **C**omputers and **H**umans **A**part
- Multipart email messages with **attachments** and embedded **html**
 - Unit Test your apps

Persistent Storage

Secure

HTTP Only

Zombie

Persistent

Session

Cookies

Cross Platform, Open Source



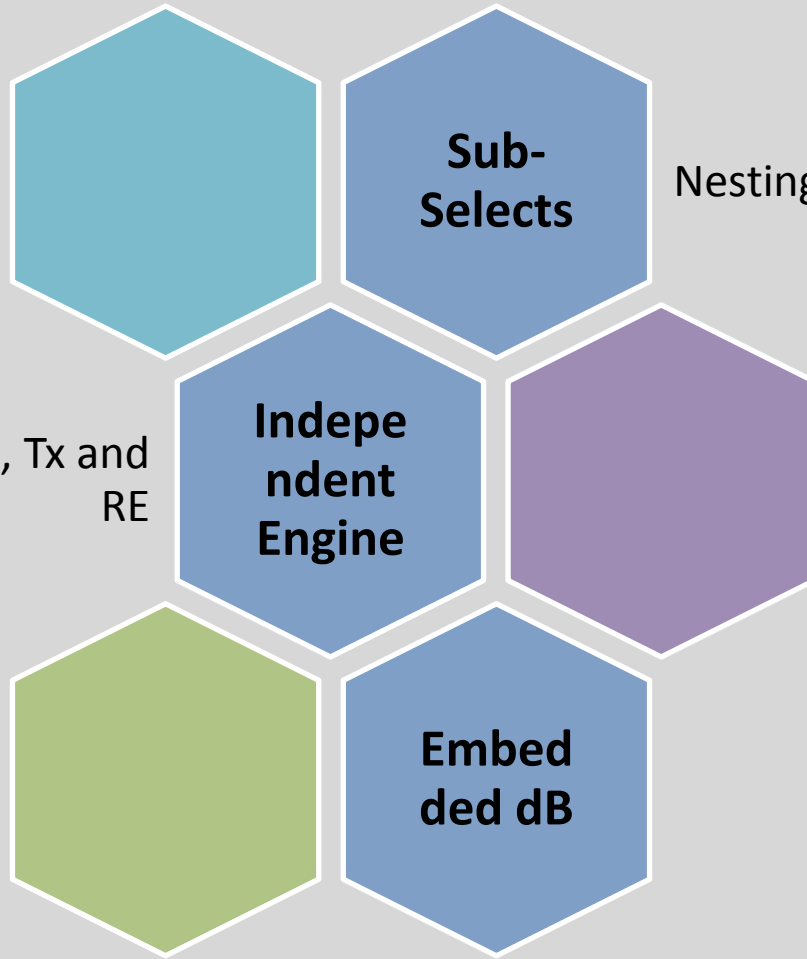
Stored Procedures



Query caching, Full text Index



MySQL®

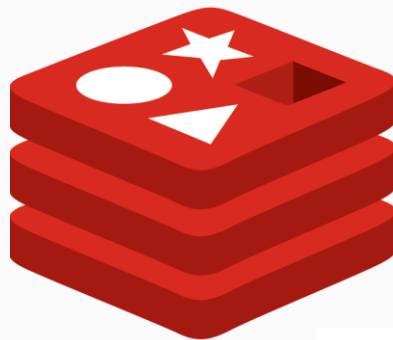


Nesting of selects

For Read, Tx and RE



MySQL®



redis



riak



Cassandra



mongoDB



Apache
CouchDB

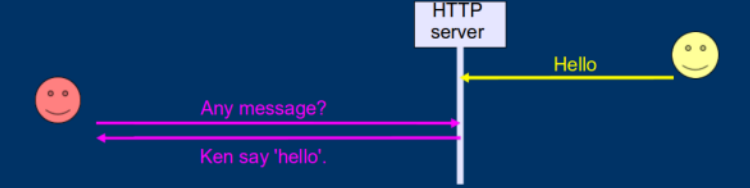


membase

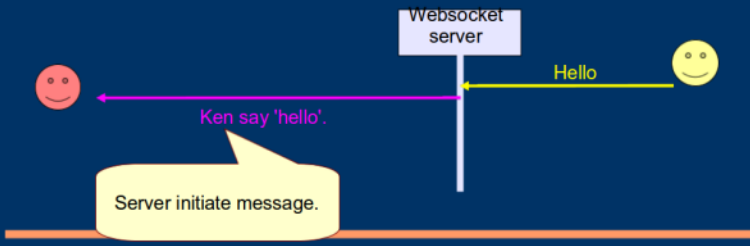
CouchBase

Before & After websocket

Before (HTTP : request & response) too traditional way...

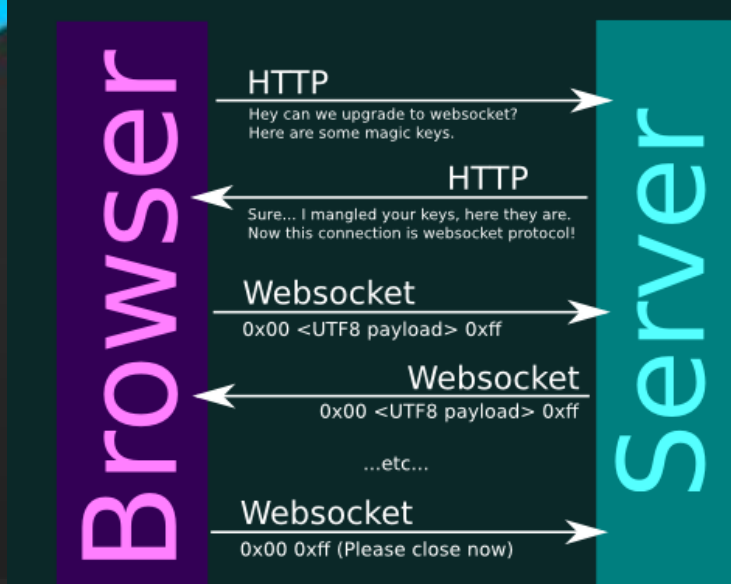


After (Websocket : bidirectional)



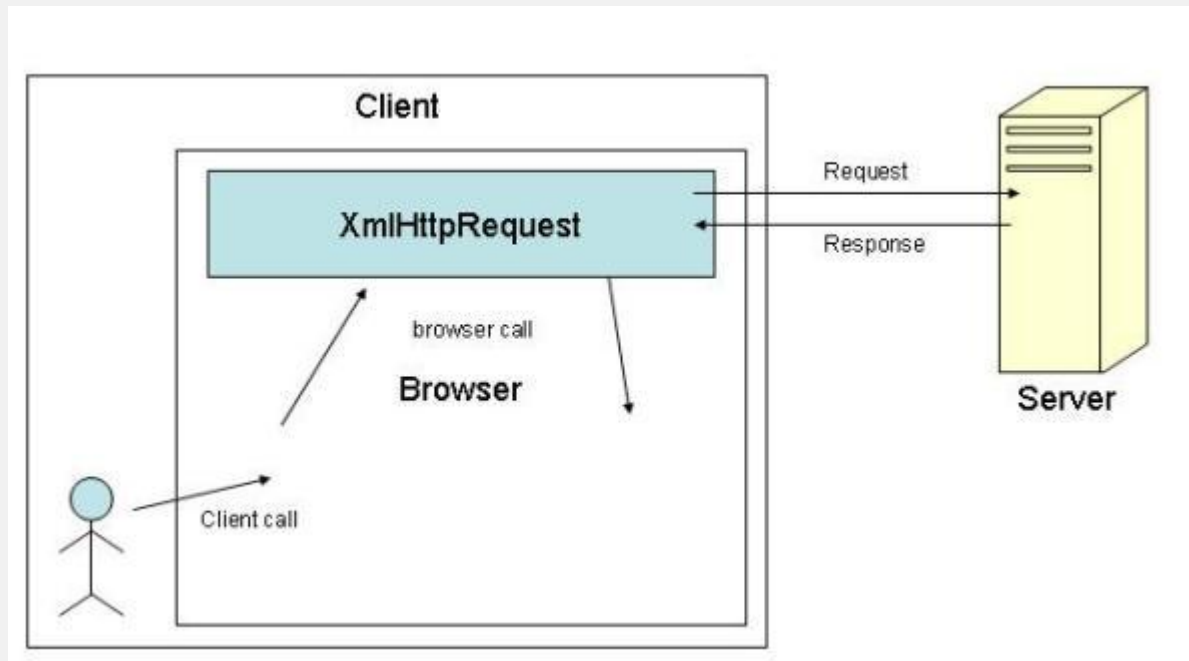
WEBSOCKETS

Embracing the real-time Web



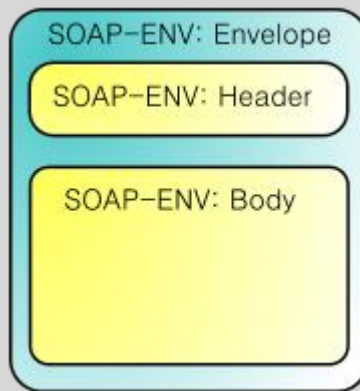
XMLHttpRequest

- Update a web page without reloading the page
- Request data from a server after the page has loaded
- Receive data from a server after the page has loaded
- Send data to a server in the background

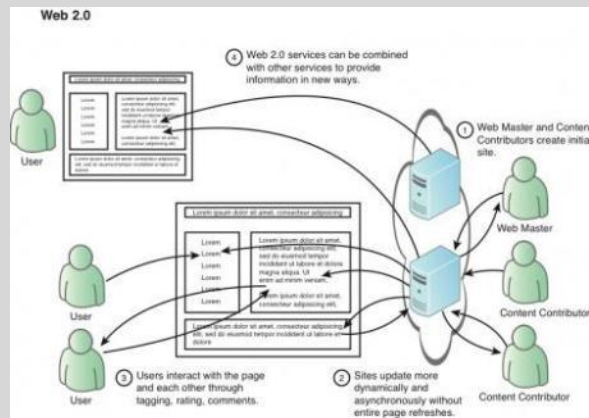


...of SOAPs and ReST

- Simple Object Access Protocol \Leftrightarrow XML MPI



- Representational State Transfer \Leftrightarrow CRUD via HTTP



Whew, that's it for today 😊

