Tools, HTML5 and CSS3

Recap

- Server-Client (Continuation)
- More on selectors (Css)
- **Box model**
- **Position property**
- Steal a website (live coding)

Agenda for today

- Problems with the project?
- HTML5 elements
- CSS1 - CSS3
- Bootstrap (Live coding)

HTML5 elements

```
<!DOCTYPE html>

<header>

    <nav> Home    Link1    Link2    Link3 </nav>

</header>

<main>

    <article>.....</article>

</main>

<footer>.....</footer>
```

HTML5 elements

```html
<video width="480" controls poster="https://archive.org/download/WebmVp8Vorbis/webmvp8.gif" >
  <source src="https://archive.org/download/WebmVp8Vorbis/webmvp8_512kb.mp4" type="video/mp4">
  <source src="https://archive.org/download/WebmVp8Vorbis/webmvp8.ogv" type="video/ogg">
  <source src="https://archive.org/download/WebmVp8Vorbis/webmvp8.webm" type="video/webm">
  Your browser doesn't support HTML5 video tag.
</video>

<canvas></canvas>

<audio></audio>
```

Let's check this one out!

HTML5 and the semantic web

- Examples of **non-semantic** elements: <div> and <span> - Tells nothing about its content.
- Examples of **semantic** elements: <form>, <table>, and <img> - Clearly defines its content.
- HTML5 has 2 main contributions
  - The enriching of the semantic content of documents
  - Scripting application programming interfaces (APIs) that can be used with JavaScript

CSS1

```css
div {

    float: left;

    width: 200px;

    height: 150px;

}
```

Remember this guy?

CSS2 - inline-block

```css
div {

    float: left;

    width: 200px;

    height: 150px;

}
```

```css
div {

    display: inline-block;

    width: 200px;

    height: 150px;

}
```

This is the new way
Let's try it out

CSS3 - box-shadow

#link {

   background: #F38514;

   text-decoration: none;

   box-shadow: 1px 3px 2px 1px #999;

}

CSS3: h-shadow, v-shadow, blur, spread
Let's try it out!

#link:hover {

   background: #D2700C;

   cursor: pointer;

}

This is just cool!

CSS3 - image background and gradients

```
#paper-bg {

    background-image: url(paper.gif);

    background-repeat: repeat;

}

#gradient {

    background: linear-gradient(red, yellow);

}
```

CSS3 - more gradients

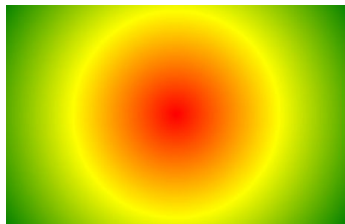background: linear-gradient(red, yellow); /* default */

background: linear-gradient(to right, red , yellow); /* left to right */

background: linear-gradient(to bottom right, red, yellow); /* diagonal */

background: linear-gradient(red, yellow, green); /* multiple colors */

background: radial-gradient(circle, red, yellow, green); /* Circle */

CSS3 - transforms

```css
div {

    background: #F38514;

    width: 100px;

    transform: rotate(20deg);

}
```
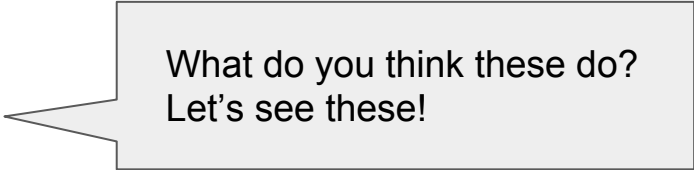
Transforms!

CSS3 - transforms

```
transform: translate(50px,100px);

transform: translateX(100px);

transform: translateY(100px);

transform: rotate(20deg);

transform: scale(2,3);
```

What do you think these do?
Let's see these!

CSS3 - transitions

```
div {

    background: #F38514;

    width: 100px;

}
```

```
div:hover {

    width: 300px;

    background: purple;

    transition: width 2s;

}
```

CSS3: lets try it out!

CSS3 - transforms with transitions

Enter the Bootstrap

Bootstrap - how to get it

- Download (CSS, JavaScript) ~> Link to it it in your html
- Use a CDN (Prefered)
  - ```html
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css" integrity="sha384-1q8mTJOASx8j1Au+a5WDVnPi2lkFfwwEAa8hDDdjZlpLegxhjVME1fgjWPGmkzs7" crossorigin="anonymous">

    <!-- Optional theme -->
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap-theme.min.css" integrity="sha384-fLW2N01lMqjakBkx3l/M9EahuwpSfeNvV63J5ezn3uZzapT0u7EYsXMjQV+0En5r" crossorigin="anonymous">
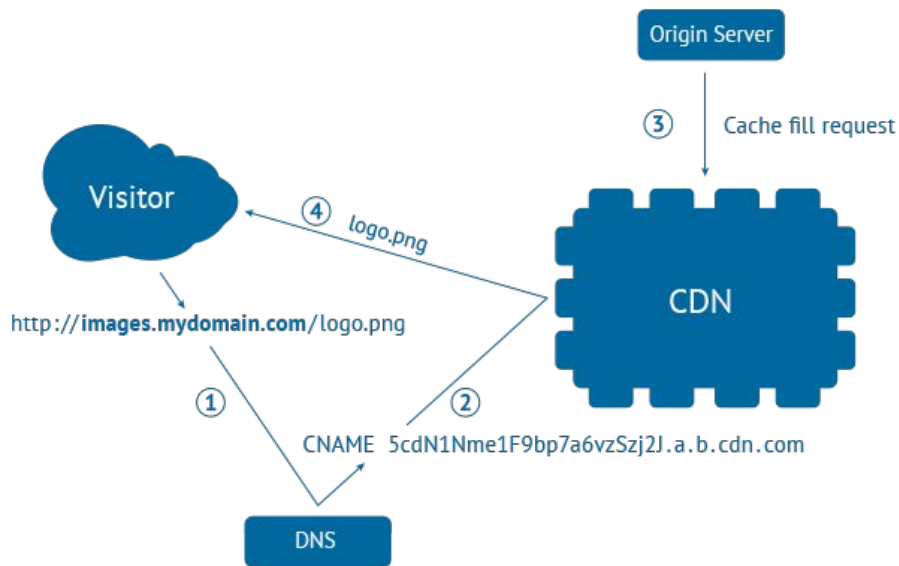
    <!-- Latest compiled and minified JavaScript -->
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js" integrity="sha384-0mSbJDEHialfmuBBQP6A4Qrprq5OVfW37PRR3j5ELqxss1yVqOtnepnHVP9aJ7xS" crossorigin="anonymous"></script>
    ```

# CDNs

Wikipedia: *A **content delivery network** or **content distribution network** (**CDN**) is a globally distributed network of proxy servers deployed in multipledata centers. The goal of a CDN is to serve content to end-users with high availability and high performance.*

# Bootstrap - how to use it

**Let's stop talking and start chalking!**

# To next lecture...

- Try out some bootstrap in your website (not mandatory)
- Watch this [video](#) (Javascript for beginners 1, 5 h)

**Thanks and good luck!**