CSS Layouts & StackOverflow

Agenda

- CSS layouts and positioning
- Google clone

CSS layouts

Before you start coding your website, you have to make a **sketch** of how it would look like (we call this **wireframing**). Group the website elements and content into rectangles (see the image below). These rectangles are then coded using `<div>` elements.

The `<div>` elements **don't do anything by default**. It's up to you to **configure** them: for example give them a height and width and position them on the website. You can find a lot of very good examples of using divs on [LearnLayout](). Let's try some of them out!

Go to **jsFiddle** and create a div element in the HTML window:

```
<div></div>
```

So far, this **div is empty and invisible** on the website (all divs are like this by default). If you click Run, you won't see it in the Browser window because it's size is 0px. Let's give it some CSS to make it visible!

Div navigation bar

HTML:

```
<div class="navigation"></div>
```

CSS:

```css
.navigation {
    background-color: red;
    height: 50px;
    width: auto;
}
```

Div in the middle

HTML:

```html
<div id="main"></div>
```

CSS:

```css
#main {
    width: 600px;
    margin: 0 auto;
}
```

Margin and padding

HTML:

```html
<div class="umakni">Besedilo</div>
```

CSS:

```css
.umakni {
    background-color: red;
    margin: 100px;
    padding: 100px;
}
```

Relative position - two divs that overlap

HTML:

```html
<div class="relative1"></div>
<div class="relative2"></div>
```

CSS:

```css
.relative1 {
    background-color: red;
    position: relative;
}
.relative2 {
    position: relative;
    top: -20px;
    left: 20px;
    background-color: green;
    width: 500px;
}
```

Fixed div position at the bottom of a screen

HTML:

```
<div class="fixed"></div>
```

CSS:

```
.fixed {
    position: fixed;
    bottom: 0;
    right: 0;
    width: 200px;
    background-color: white;
}
```

CSS positioning tricks

Here are some more CSS tricks using `<div>` elements:

- place div to the right side: https://jsfiddle.net/ramuta/0fpg6xfb/
- put div to the middle of a screen: https://jsfiddle.net/ramuta/mxg6fqqr/
- the other way to put div right: https://jsfiddle.net/ramuta/b1Lhfv9m/
- place div to the bottom (not fixed): https://jsfiddle.net/ramuta/nsntxs89/
- fix div to the bottom of a screen: https://jsfiddle.net/ramuta/hewy1hca/
- move div anywhere on the screen: https://jsfiddle.net/ramuta/u2cj64g8/
- put divs inline (side-by-side): https://jsfiddle.net/ramuta/Ls6xgrt1/

Let's create a fake Google site

Instructor will do this exercise together with students at the lesson.

Great news: you got your **first big coding project!** Your task is to create a **Google clone** called Boogle. Some Brazilian billionaire decided to create his own version of Google and he chose to **hire you** to build it. Sounds hard? Don't worry - it's easier than it seems :)

Go to Google.com and take a look how it looks like. Draw a wireframe of the page and determine the layout (divs). Then start building the page.

Homework 3.1: install Git (obligatory)

In the next lesson we are going to talk about Git, so install Git at home (before the next lesson).
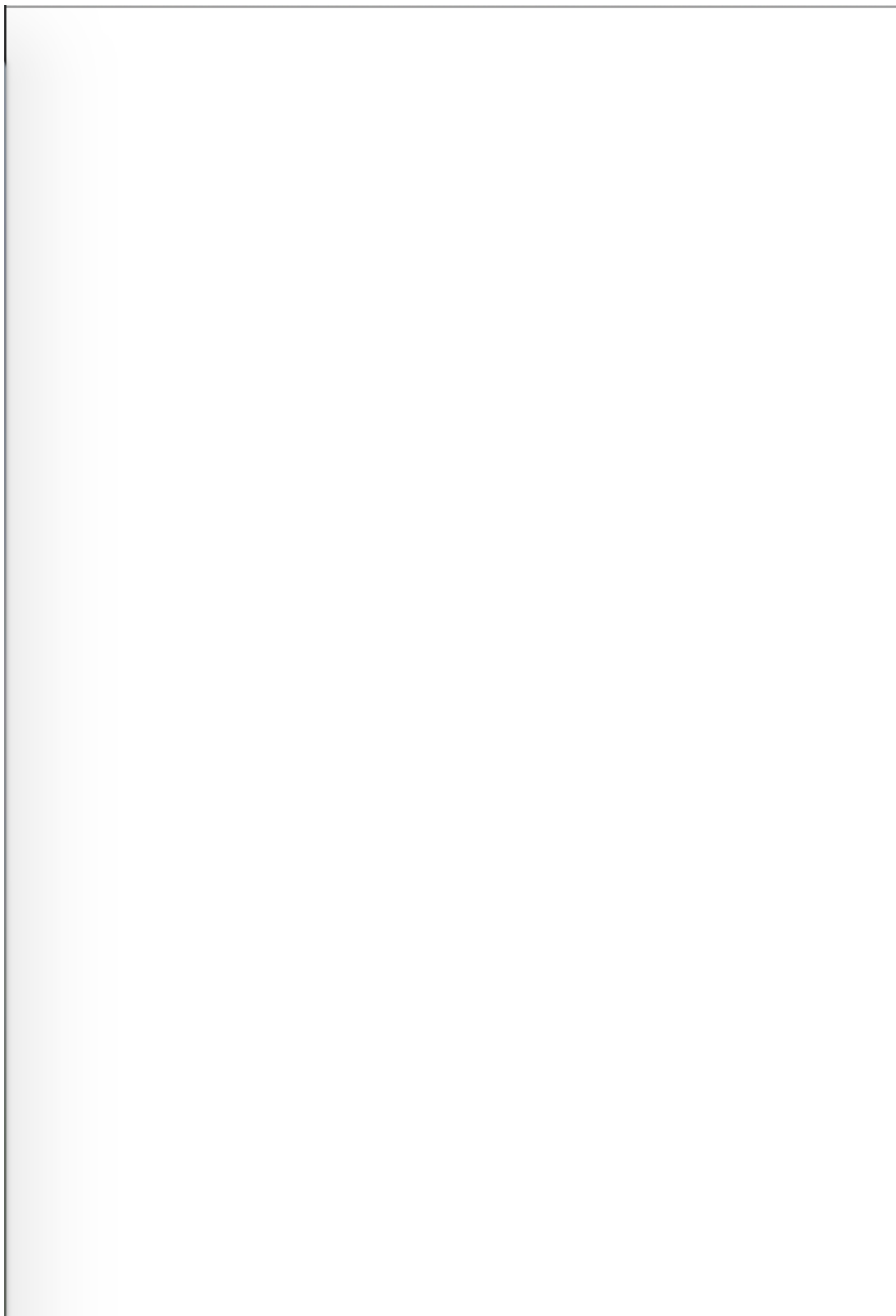
How to install Git?

Go to http://git-scm.com/downloads and download Git (when installing just click "next" and use the default seetings).

Homework 3.2: Codecademy

Do the **CSS positioning** exercise on Codecademy.

Homework 3.3: Boogle login

Add Boogle a login page. It should also look similar to the Google login page:

When you finish, paste the code in GitHub Gist: https://gist.github.com/ and share it on the SmartNinja forum.

One of possible solutions: https://github.com/smartninja/wd1-exercises/tree/master/lesson-3. There's no need for your solution to be completely the same as the original Google Login. But try to come as close as possible.

Bonus

- More CSS tricks! https://css-tricks.com/almanac/
- Good explanation of different position types (relative, absolute, fixed in static): https://css-tricks.com/absolute-relative-fixed-positioining-how-do-they-differ/
- Another good website with CSS layout tricks: http://learnlayout.com/