Interactive Multimedia Programming 1. Assignment set

Basics, basics basics. On this set we will rehearse the basics of web technologies, we will also install development tools we use.

1. Definitions:

Write descriptions / definitions of these topics. Please, do not copy paste. Use your own words and make sure that you understand everything you write.
   a. HTML
   b. CSS
   c. Javascript
   d. HTTP
   e. HTML5
   f. Dynamic HTML (DHTML)

2. Coding conventions:

OK, this may sound boring but coding conventions are really important when you are doing code professionally. Make yourself familiar what this actually means in practice.

Here is a generic definition:
https://en.wikipedia.org/wiki/Coding_conventions

Find conventions from for html / css / is from Internet which you are going to use on this course. Like: http://codeguide.co/

And from now on, use these conventions every time you write html. If your code does not follow the conventions, you can not pass this course.

Write down what is your understanding of the coding conventions. Why they are important to follow? What kind of conventions you are going to use.

3. HTML5

   a. Create a simple HTML5 document. Please do not copy paste, and remember to follow coding conventions. You can find an example from here:
   http://www.w3.org/TR/html5/single-page.html#a-quick-introduction-to-html

   The document linked above actually is an official specification of the HTML version 5. Browse through the document and store the link to your bookmarks. It will be valuable later on.
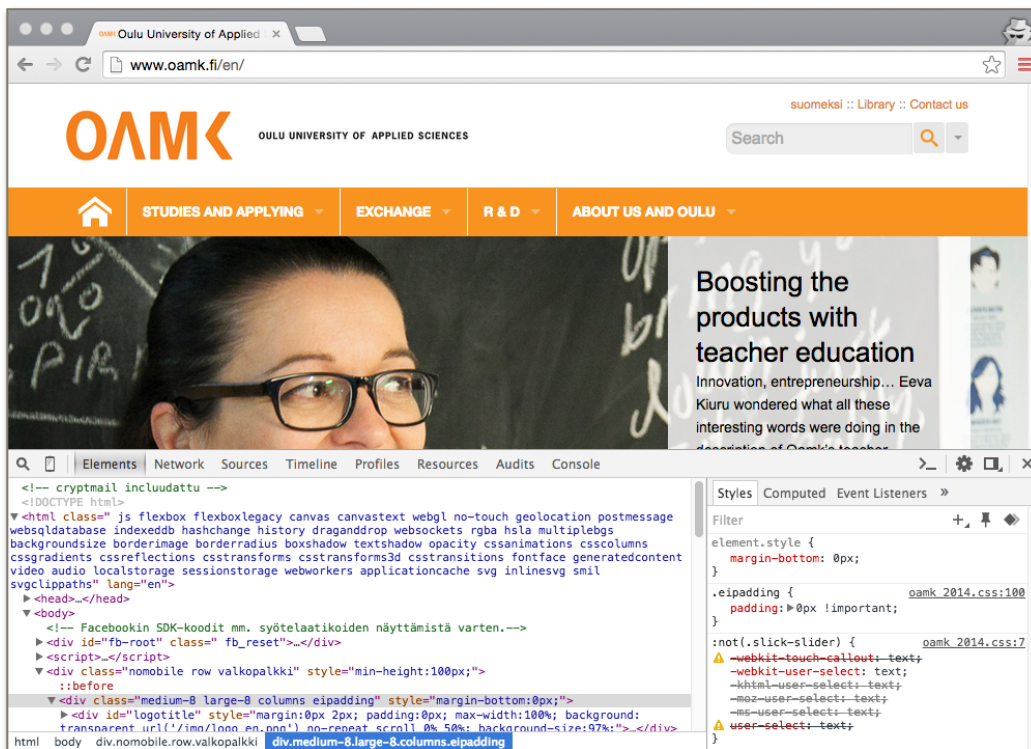
b. Modify previous document so that you will have an
    a. external style sheet file (.css) with styles
    b. external Javascript file (.js)

Both of these files should be linked and used in .html file.

4. Developer tools

Every modern browser contains developer tools. Find how you can activate these tools for the browser you are using. Get yourself familiar at least with the **inspector** and the **Javascript console.**

I recommend to use Chrome during this course. That's the browser I'm using.

5. Dynamic HTML

Create a simple person list web application. With this app you should be able to list persons.

Do not use any Javascript frameworks (like jQuery).

I want you to learn the basics what happens "under the hood".

In practice you should dynamically modify dom tree of the browser view.
See example of the user interface on the next page.

Extra task if you have time (not mandatory). Modify the previous web application to follow MVC (Model View Controller) design pattern.

6. Node.js

Install node.js environment to your PC. You can find installation packages from here.
Please use the LTS-version (recommended for most users).

https://nodejs.org/en/

Run a simple hello world to make sure you have a working environment. You can find the code from my git repo:
https://github.com/oamk-veikko/courses/blob/master/interactive_multimedia_programming/node_demo_code/hello/hello.js