

Interactive Multimedia

Programming 1. Assignment set

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

HTML (Hypertext Markup Language) is a set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page. The markup tells us how to display a Web page's words and images for the user. Each individual markup code is referred to as an element (but many people also refer to it as a tag).

b. CSS

A cascading style sheet (CSS) is a Web page derived from multiple sources with a defined order of precedence where the definitions of any style element conflict. The Cascading Style Sheet, level 1 (CSS1) recommendation from the World Wide Web Consortium (W3C), which is implemented in the latest versions of the Netscape and Microsoft Web browsers, specifies the possible style sheets or statements that may determine how a given element is presented in a Web page.

c. Javascript

Javascript (JS) is a scripting languages, primarily used on the Web. It is used to enhance HTML pages and is commonly found embedded in HTML code. JavaScript is an interpreted language. Thus, it doesn't need to be compiled. JavaScript renders web pages in an interactive and dynamic fashion.

d. HTTP

HTTP is short for HyperText Transfer Protocol. HTTP is the underlying protocol used by the World Wide Web and this protocol defines how messages are formatted and transmitted, and what actions Web servers and browsers should take in response to various commands.

e. HTML5

Hypertext Markup Language revision 5 (HTML5) is markup language for the structure and presentation of World Wide Web contents. HTML5 supports the traditional HTML and XHTML-style syntax and other new features in its markup, New APIs, XHTML and error handling.

f. Dynamic HTML (DHTML)

Dynamic HTML is a collective term for a combination of Hypertext Markup Language (HTML) tags and options that can make Web pages more animated and interactive than previous versions of HTML. Much of dynamic HTML is specified in HTML 4.0. Simple examples of dynamic HTML capabilities include having the color of a text heading change when a user passes a mouse over it and allowing a user to "drag and drop" an image to another place on a Web page.

2. Coding conventions:

Why coding conventions:

The main reason for using a consistent set of coding conventions is to standardize the structure and coding style of an application so that you and others can easily read and understand the code.

Good coding conventions result in precise, readable, and unambiguous source code that is consistent with other language conventions and as intuitive as possible.

The coding convention that I am going to use:

HTML, CSS

For HTML:

1. I will use correct Document Type
2. I will use Lower Case Element Names
3. I will close all HTML Elements
4. I will close Empty HTML Elements
5. I will use Lower Case Attribute Names
6. I will avoid Long Code Lines

For CSS:

1. I will use ID and class names that are as short as possible but as long as necessary.
2. in order to improve understanding and scannability, I will not concatenate words and abbreviations in selectors by any characters.
3. I will use separate files (concatenated by a build step) to help break up code for distinct components.
4. It is also useful to have a brief update log for large projects
5. If the value of the width or height is 0, I will not specify units.

3. HTML5

Simple html5 document:

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="utf-8">
```

```
  <title>The simple HTML5 document</title>
```

```
  <meta name="author" content="SitePoint">
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

Simple html5 document with css:

```
<html lang="en">  
<head>  
  <meta charset="utf-8">  
  
  <title> The simple HTML5 document </title>  
  <meta name="description" content="The HTML5 Herald">  
  <meta name="author" content="SitePoint">  
  
  <link rel="stylesheet" href="css/styles.css?v=1.0">  
</head>  
<body>  
</body>  
</html>
```

Simple html5 document with js:

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="utf-8">
```

```
  <title> The simple HTML5 document </title>
```

```
  <meta name="description" content="The HTML5 Herald">
```

```
  <meta name="author" content="SitePoint">
```

```
  <link rel="stylesheet" href="css/styles.css?v=1.0">
```

```
<!--[if lt IE 9]>
```

```
  <script
```

```
src="https://cdnjs.cloudflare.com/ajax/libs/html5shiv/3.7.3/html5shiv.js"></script>
```

```
<![endif]-->
```

```
</head>
```

```
<body>
```

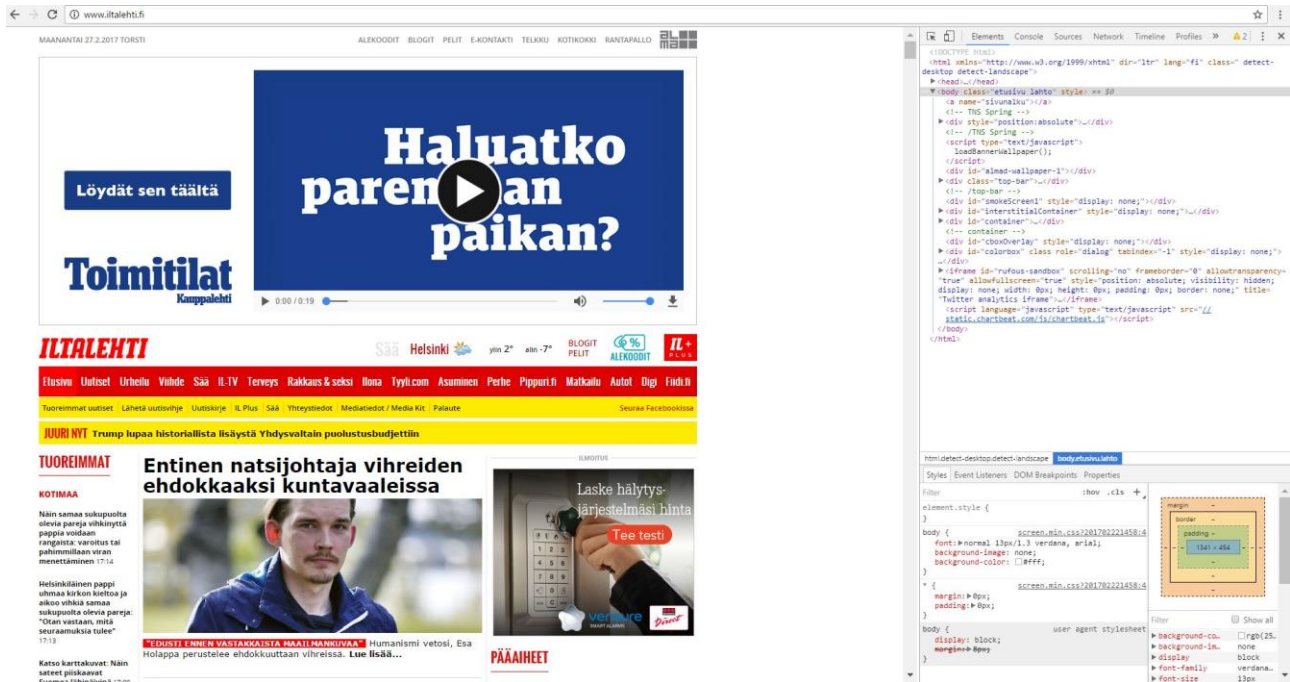
```
  <script src="js/scripts.js"></script>
```

```
</body>
```

```
</html>
```

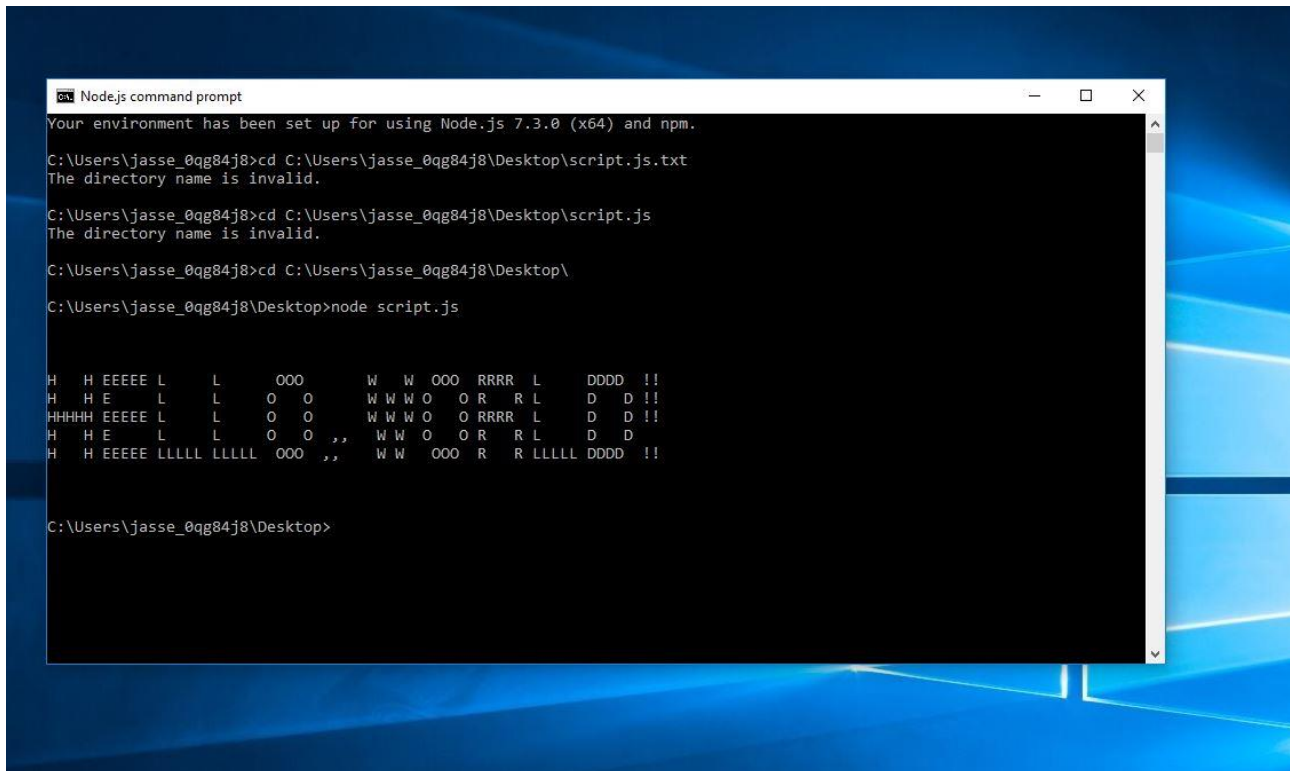
4. Developer tools

An example of Google chrome developer tool:



6. Node.js

This is a screenshot of my HELLO WORLD



```
Node.js command prompt
Your environment has been set up for using Node.js 7.3.0 (x64) and npm.
C:\Users\jasse_0qg84j8>cd C:\Users\jasse_0qg84j8\Desktop\script.js.txt
The directory name is invalid.
C:\Users\jasse_0qg84j8>cd C:\Users\jasse_0qg84j8\Desktop\script.js
The directory name is invalid.
C:\Users\jasse_0qg84j8>cd C:\Users\jasse_0qg84j8\Desktop\
C:\Users\jasse_0qg84j8\Desktop>node script.js

H H EEEEE L L OOO W W OOO RRRR L DDDD !!
H H E L L O O W W W O O R R L D D !!
HHHHH EEEEE L L O O W W W O O RRRR L D D !!
H H E L L O O ,, W W O O R R L D D
H H EEEEE LLLLL LLLLL OOO ,, W W OOO R R LLLLL DDDD !!

C:\Users\jasse_0qg84j8\Desktop>
```