Fall 2024-2025

Instr. Ceren Kayalar

VCD426

Interactive Media Design

Lecture 1 - Hello Web



Lecturer

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Interaction Design / Human - Computer Interaction / Computational Media
https://cerenkayalar.github.io/teaching/

Academic Education 2000 - 2015





Instructor
2016 - ...









Why did you take this class?

What are your questions?

Join at menti.com | use code 3272 4453



The Process

You are not gonna walk out of this course as a programmer, but

- You will be familiar with the **terminology**,
- You will be familiar with the culture of programming and design for web,
- You will understand what kinds of technologies are out there.

Learning by doing! Like learning to play a musical instrument.

Not writing things from scratch, but recognizing!

Web media creation process: **Search**, **rip** and **mash** (@Prof. Lonce Wyse)

Aim: Develop abilities to create and express yourself through web medium

Lecture Structure & Student's Workload

Theory syntax of the languages/tools

Examples the more the merrier!

Exercises counts to the Participation grade (check Syllabus)



You are expected to **spend 3-4 hrs** outside classroom on reviewing the class content and assignments

The Web

WWW (World Wide Web) was invented in CERN

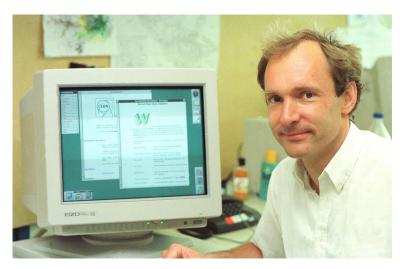
1989 Tim Berners-Lee: inventor of the web

The first website ever: The World Wide Web project

1995 Microsoft's IE

W3C.org (The World Wide Web Consortium) develops standards and guidelines for the Web including HTML, CSS, XML, WebXR etc.

- The birth of the Web | CERN
- <u>CERN 2019 WorldWideWeb Rebuild</u> for the 30th anniversary of the WWW
- The Browser WorldWideWeb NeXT Application
 UI patterns of the first browser



** Answers for young people - Tim Berners-Lee

The World Wide Web project

Q: I'm a student of visual communications and asked myself why links are blue. I found some answers that might be, for example blue is a color of learning, but I'm not sure what is right. Is there any reason, why links are colored blue?

A: There is no reason why one should use color, or blue, to signify links: it is just a default. I think the first WWW client (WorldWideWeb I wrote for the NeXT) used just underline to represent link, as it was a spare emphasis form which isn't used much in real documents. Blue came in as browsers went color - I don't remember which was the first to use blue. You can change the defaults in most browsers, and certainly in HTML documents, and of course with CSS style sheets. There are many examples of style sheets which use different colors.

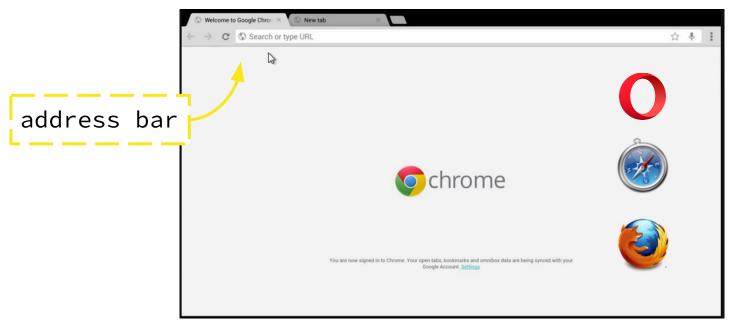
My guess is that blue is the darkest color and so threatens the legibility least. I used green whenever I could in the early WWW design, for nature and because it is supposed to be relaxing. Robert Cailliau made the WWW icon in many colors but chose green as he had always seen W in his head as green.

One of the nicest link renditions was Dave Raggett's "Arena" browser which had a textured parchment background and embossed out the words of the link with a square apparently raised area.

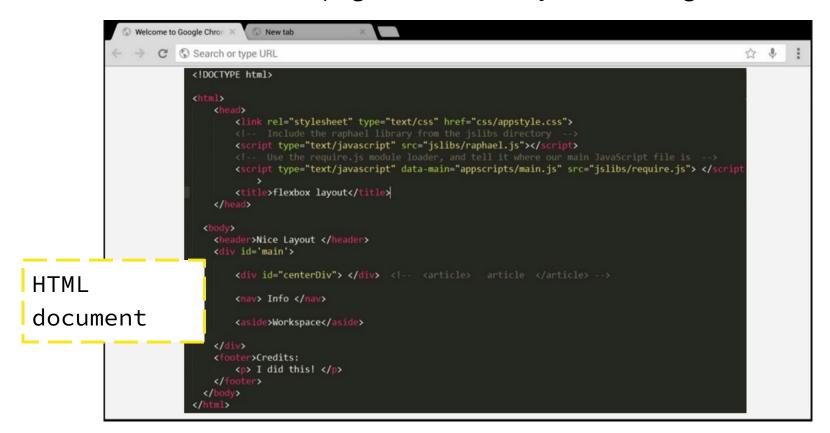
https://www.w3.org/People/Berners-Lee/FAO.html

What is a Browser?

A **browser** is a **program** that runs on your computing device displaying documents it can retrieve from the web (or local)



... the content of that page is actually something like this





Languages of the Web

- 1. HTML to define the content of web pages
- 2. <u>CSS</u> to specify the layout of web pages
- 3. <u>JavaScript</u> to program the behavior of web pages

Editing in the IDE

IDE: Integrated Development Environment



We will use Visual Studio Code

https://code.visualstudio.com

...alternatives:







Sublime Text



Atom (sunsetted)

HTML: Hypertext Markup Language

Defines the content and structure of the web

@1992 by Tim Berners-Lee a markup language

1993 W3 Consortium

<u> 2 - A history of HTML @W3C</u>

```
<!DOCTYPE html>
   <html>
     <head>
       <meta charset="utf-8">
       <title>My test page</title>
     </head>
     <body>
       <h1>Mozilla is cool</h1>
       <img src="images/firefox-icon.png" alt="The Firefox logo: a flaming fox</pre>
   surrounding the Earth.">
10
11
       At Mozilla, we're a global community of
       <!-- changed to list in the tutorial -->
14
         technologists
         thinkers
        builders
17
       working together to keep the Internet alive and accessible, so people
   worldwide can be informed contributors and creators of the Web. We believe this
   act of human collaboration across an open platform is essential to individual
   growth and our collective future.
       Read the <a href="https://www.mozilla.org/en-US/about/manifesto/">Mozilla
   Manifesto</a> to learn even more about the values and principles that guide the
   pursuit of our mission.
     </body>
23 </html>
```

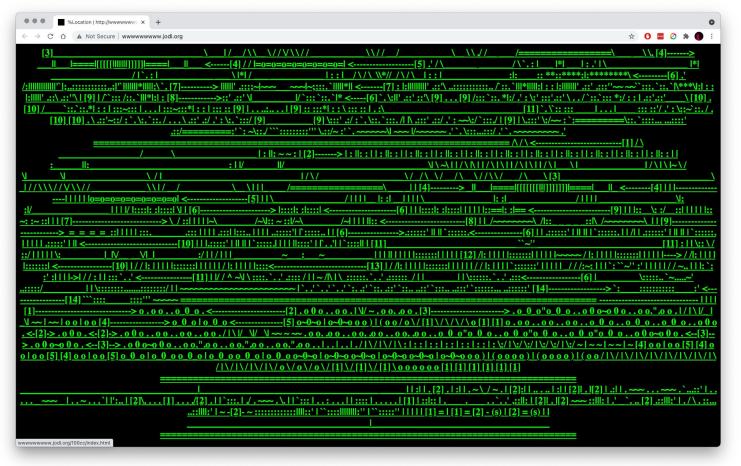
Demo: Inspect

You can see the HTML of any webpage by right clicking and selecting *View Page Source*

Inspect elements

Delete Google

Change Apple prices on Apple studio



art with web @90s http://wwwwwwww.jodi.org/

CSS - Cascading Style Sheets

1995 @W3 Consortium

styling/skinning the HTML documents

Demo One HTML page multiple styles CSS Introduction @W3Schools

*** W3schools is not affiliated with the w3 consortium

CSS properties CSS Reference @w3Schools

JavaScript formerly ECMAScript

Making things interactive on every device! Mobile phones, Tablets, PCs... Anything that runs a browser

@1995 was invented by Brendan Eich for the browser "Netscape"

ECMA International's (a non-profit association working on standards for the information and communication industry) IC39 (TC:technical committee) is maintaining JS



https://thecodingtrain.com/tracks/code-programming-with-p5-js

Can you explain that word you said?

Could you go through that again, slower?

Will you repeat that last thing you said?

Will you explain that a different way?

Could you do another example?

Asking questions are encouraged and mandatory in this class!

Web Medium

Text / images / videos / animation / audio / audio synthesis

Libraries: 3D graphics, access to databases etc.

Communication

<u>Intro to the box model - Webflow</u> <u>University Documentation</u>

- 1. Everything can be represented in boxes (Boxes in web, layers in design tools like InDesign, Figma etc.)
- Boxes flow like a text document
- Control

The Box Model

Let's Dive In!

- Download the IDE: VSCode
- Example: Hello World
- Create your first html page
 - a tree structure:
 - branches/levels
 - indentation
 - HTML tags / elements
 - Headers, paragraphs
 - Comments (Edit menu)

```
<!DOCTYPE html>
 3
    <html> T
 4
        <head>
             <title> Example 0</title>
        </head>
 8
9
        <body >
10
             Hello World!
11
        </body>
12
    </html>
```

HTML Element Reference - By Category

Top choices in 2023 Design Tools Database @UXTools

Figma <u>Basic Prototyping Tools</u>

<u>UI Design Tools</u>

<u>Design System Tools</u>

Webflow <u>Portfolio Builder Tools</u>

Miro <u>Whiteboarding Tools</u>

Zeplin <u>User Flow Tools</u>

ProtoPie <u>Advanced Prototyping Tools</u>

https://uxtools.co/survey/2023/portfolio-builders

Useful Links

- CSS: Cascading Style Sheets | MDN
- HTML: HyperText Markup Language | MDN
- <u>JavaScript | MDN</u>
- W3Schools
- Webflow University
- UX Tools

Extras

- Glitch
- Web Design Resources | Vako Shvili

Next Steps

You will learn how to learn

Creating a proper folder structure is very important. We'll dive into this in the next week. But maintain a structure and stick with it.

vcd426f24 > lecture1 > HelloHTML > index.html

For the next class:

Start collecting your portfolio materials

30 years of a free and open Web (5 min)

<u>ForEveryone.net | The web, past and future</u> <u>[subtitles] | Web Foundation</u> (35 min)