

Introduction

Web Authoring and Design

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Outline

- What do we mean by Web Authoring and Design?
- What is HTML, CSS and Javascript
- Structure of the Course
- Assessment/Marking
- Review/Discussion

Recommended Reading

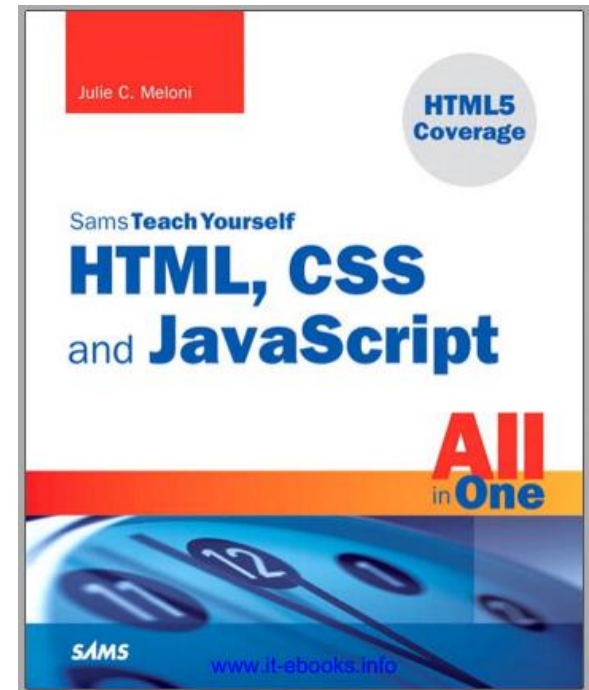
■ SamsTeachYourself HTML, CSS and JavaScript All in One

▷ Ebook Available

▷ <https://zjnu2017.github.io/WAD>

■ Chapter 1, 2 and 3

▷ Read This Week



Recommended

- Also read around the subject to gain a broad/comprehensive understanding of the topic
 - ▷ Articles, books, online-tutorials, ...
- Huge number of examples/tutorials online to complement this course

Grading

■ 1. Attendance:	5%
■ 2. Quiz:	15%
■ 3. Individual Project:	10%
■ 4. Group Project:	20%
■ 5. Final Exam:	50%

What is a Web Browser?



Chrome



Firefox



Internet Explorer



Opera



Safari

What is a Web Browser?

- A browser is a document viewer. What kind of document? Webpages



Chrome



Firefox



Internet Explorer



Opera



Safari

What is a Webpage?

What is a Webpage?

- Webpages are just text files with a .html extension
- Webpages are HTML documents, like other files on your computer (e.g., .doc, .jpg, ..)
- HTML is like MS Word but for the Web
- Webpages follow a predefined file format
- Learn this file format so you can create your own webpages

What does HTML look like?

- HTML code looks like this:

```
|<p>Hello world</p>
```

- The browser sees the <p> and </p> tags and understands that Hello World is a paragraph
- 'Tag' based language

As any language, HTML has rules

- HTML stands for HyperText Markup Language:
- **HyperText** means that it uses the HTTP part of the Internet
- **Markup** means the code you write is annotated with keywords
- **Language** means it can be read by both a human and a computer
- Like any language, HTML comes with a set of rules. These rules are relatively simple. It comes down to defining boundaries, to know where something starts and where something ends.

Brackets

- Here is a sample paragraph in HTML:

<p>Once upon a time...</p>

- What you see in angle brackets < and > are HTML tags. They define where something starts and where it ends
- p stands for paragraph

Start – End Tags

- Tags **usually** go in pairs:
- For example, with the paragraph:
 - ▷ the opening tag **<p>** defines the start of the paragraph
 - ▷ the closing tag **</p>** defines its end
- Only difference between an opening and closing tag is the slash **/** that precedes

First Webpage

- Create empty text file (e.g., .txt but you'll change the extension to .html)
- Type the following:
<p>This is my firstwebpage!</p>
- Save the file as 'hello.html'
- Open the file in your browser (e.g., Chrome or Explorer)

Tag Attributes

- Tags can have additional information
- For example, the href attribute is used to define the target of a link (which uses an anchor tag)

`Cats`

Comments

- Write text or information that is ignored by the browser (i.e., comments)
- A comment starts with `<!--` and ends with `-->`

```
<!-- This sentence ignored by the browser -->  
<p>Hello World!</p>
```


Self-Enclosing Elements

`
 <!-- line-break -->`

` <!--
image -->`

`<input type="text"> <!-- text input -->`

Errors

Order/Hierarchy

`<!-- This is INVALID code! :-(-->`

`<p>This HTML code won't work because I
the "strong" tag is opened here
but is only closed after the
paragraph.</p>`

Why?

- Because the `` was opened after the `<p>` (and is thus considered a child of `<p>`), the `` element must be closed before its parent `<p>`

`<!-- This is valid code. :-) -->`

`<p>This HTML code will work because I the "strong" tag is opened and closed properly.</p>`

Important Note

■ Whitespaces and newlines don't matter

■ i.e.,

▷ line-breaks

▷ empty lines

▷ tabulations (or indentation)

A valid HTML document

- Previously looked at isolated snippets
- HTML document (or webpage, it means the same thing) requires a specific structure in order to be valid

Complete Valid HTML Document

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

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

```
<title>MarkSheet</title>
```

```
<meta name="description" content="A simple HTML and CSS page">
```

```
</head>
```

```
<body>
```

```
<p>Hello World!</p>
```

```
</body>
```

```
</html>
```

Details

■ <Doctype html>

- ▷ tell the browser the HTML document is a HTML 5 document (version details)

■ <html>

- ▷ all your HTML document must be wrapped inside

■ <head>

- ▷ Attributes/information for the whole webpage (metadata not meant to be displayed anywhere)

■ <body>

- ▷ Everything inside the <body> will be displayed in the browser window

GitHub

- Websites for you and your projects.

- <https://pages.github.com/>

- Free and Public

- Track Changes

- Useful for `Group' Assessment

- **Research Setting Up GitHub Account
this Week**



For Example

- Course notes/page for WAD are on a GitHub page:

- zjnu2017.github.io

Summary

- Overview of the Course/Plan
- Hands-On/Practical
- Assessment (Breakdown of Marks)
- Self Study (Can't learn from just attending)
- Today is about 'Getting Started'

This Week

- Review Slides

- Read Chapters 1, 2 and 3

- Create a Simple Webpage

 - ▷ E.g., notepad to create hello.html

 - ▷ Test it locally (e.g., local computer in Chrome or Explorer)

 - ▷ Experiment (e.g., different tags, typing mistakes, mobile browser, ...)

 - ▷ Setup GitHub Account/Webpage

- Start Early

Contact

■ Questions/Issues

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■ Open Door Policy

▷ Problems/Help

▷ Within Reason

Question

■ What does HTML stand for?

- a) Hypertext Markup Language
- b) Hyper Tag Mark Language
- c) Hypertext Makeup Language
- d) Hot Moodle Language
- e) Non of the above

Answer

a) Hypertext Markup Language

Hypertext Markup Language (HTML), a standardized system for tagging text files to achieve font, color, graphic, and hyperlink effects on World Wide Web pages.

Questions/Discussion

Experiment

- What are good sites to quickly experiment with JavaScript/CSS/HTML on a browser?

<http://dabblet.com/>