

# Web Page Techniques

CSCI 115

# publishing.

content design and production with HTML5 and CSS3

introduction



# the publication process

in the context of 2013

- “Copywriting”
- Editing
  - Revision
  - Content Structuring
- Design
  - Style
  - Layout
- “Typesetting”
- Production
  - Printing
  - Packaging
- Marketing
- Distribution

# HTML5

- Hypertext Markup Language
- Markup tags (also HTML tags) describe the meaning content
- Is semantic – imparts content with meaning
- Used to structure content
- Used to reference and link content

# CSS3

- Cascading Style Sheets
- Rules describe the appearance of markup tags
- Used to style content
- Combined with HTML used to define layout
- Facilitates content portability<sup>[1]</sup>

# web browsers

- Interpret HTML and CSS to display content
- Available on desktops, tablets, mobile phones, game consoles, electronic ink readers<sup>[2]</sup>, even screen readers<sup>[3]</sup>
- Multiple versions available from multiple vendors
- Versions vary in capability – should support standard<sup>[4]</sup> features



# world wide web

- Also “the internet”
- A system of interconnected computer networks
- Enables transmission of information between computers
- Web browsers - a common end-user access point

# web publishing

- **HTML** – content structuring
- HTML + **CSS** – styling and layout
- **Browsers** – automatic typesetting and production
- **Internet** – marketing and distribution

1. Portability is a concept describing content viability on multiple device and display types.
2. Electronic ink refers to set of technologies which are used to display digital content which has appearance resembling a physical printed page – electronic ink displays emit no light, and only require energy in order to “flip” pages (change the content displayed) – the Amazon Kindle is such a product.
3. A screen reader is software or hardware designed to translate visual content (from a computer screen) into a non-visual form – be it audible or haptic.
4. Web standards are set by the World Wide Web Consortium (W3C). They describe suggested authoring practices for HTML and CSS (as well as other technologies). The expectation – so far as authors are concerned – is that browsers will be able to interpret said content, all major browser vendors (Google, Mozilla, Microsoft, Apple) do.



# HTML and CSS

an introduction

# HTML

- HTML Markup tags are used to describe the meaning of content
- Documents consists of tags and plain text
- Are stored as “.html” files (e.g. page.html)
- Web browsers interpret and display content

# markup tags

- A set of **keywords** used to describe content

**html, body, head, title, p, h1, h2, abbr, dfn...**

- Consist of a keyword (also tag name) surrounded by **angle brackets**

**<abbr>**

# HTML elements

- Tags usually come in pairs – an opening and closing tag

**<abbr></abbr>**

- In the closing tag, a **forward slash** precedes the tag name

**<abbr></abbr>**

- The tags describe the **enclosed content**

**<abbr>HTML</abbr>**

- The tags and the enclosed content are an HTML element

# HTML attributes

- Additional detail about elements may be provided using attributes
- Attributes are placed in the opening tag of an element

```
<abbr title="HyperText Markup Language">HTML</abbr>
```

- Attributes are presented as a **name/value** pair

```
title="HyperText Markup Language"
```

- The value is separated from the name via an equality sign and surrounded by quotation marks



# CSS

- CSS rules are used to describe the appearance of content
- Are stored as “.css” files (e.g. style.css)
- Web browsers interpret CSS and modify the way HTML documents are displayed

# CSS rules

- CSS rules consists of **selectors** and **declarations**

```
abbr {color:pink; font-size:1cm;}
```

# CSS selectors

- CSS selectors identify the parts of an HTML document that are to be affected by the rule.
- A commonly used type of **selector** is a **tag name**

```
abbr {color:pink; font-size:1cm;}
```

- The selector appears at the beginning of a rule

# CSS declarations

- CSS declarations identify what about a part of an HTML document should be modified (color, size, font, etc.)
- CSS declarations follow the selector and are surrounded with curly brackets

```
abbr {color:pink; font-size:1cm;}
```

- Declarations consists of a property/value pair

```
abbr {color:pink; font-size:1cm;}
```

- The property and value pair are separated via a colon
- Each declaration ends with a semicolon

# Scope of the Course

- HTML basics
- Semantic markup with HTML
- Document styling and typesetting with CSS
- Document layout with HTML and CSS
- Multimedia embedding in HTML – images, video, audio
- HTML forms
- Using JavaScript scripts for adding interactivity
- Content portability and accessibility with CSS
- Content Management Systems – using WordPress

# Deliverables

- 10 in-class quizzes – at the last 10 minutes of Thursday classes (15%)
- 10 lab assignments – must be presented in person during the lab (30%)
- A website project in 2 parts – deliverable at the midterm and end of term (25%)
- Final exam (30%)
- A homemade cookie for the teacher will grant a 1% bonus – only usable once (1%)

TOTAL: 101%



# Submissions

- Quizzes are due by the end of class – no late submission accepted
- Lab Assignments are due by the end of the lab period the week after the assignment is given – late submissions accepted up to a week late with a 25% penalty
- Project Assignments are due by 11:59PM PST on the due date – late submissions are accepted with a 5% per day penalty to a maximum of 50%
- Cookies will be accepted until end of the final exam

# Academic Integrity

- According to the VIU rules:

“The work you submit must be your own, done without participation by others. It is an academic offense to hand in anything written by someone else without acknowledgement.”