WEEK 4: STYLING HTML

INFO/CS 1300: Fall 2016

COURSE MAP

Topic Area	Dates	Goals	Assignments
Introduction and Infrastructure	8/24 – 8/26	1-5	All
HTML & Structure	8/29 – 9/9	1,2	Brief Assignments
CSS & Presentation	9/12 – 9/30	2	
Client-Side Scripting: JavaScript & jQuery	10/3 – 10/21	3	
Server-Side Scripting: PHP	10/24 – 11/4	3	
Basic User Testing	11/7 – 11/18	4	Final Project
Taking a Site Live	11/21 – 12/2	1-5	

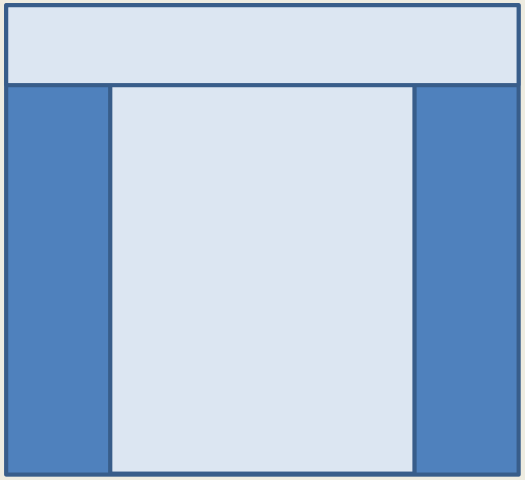
AGENDA

- Brief re-orientation.
- CSS introduction.
- Basic design principles.
- Code sample.

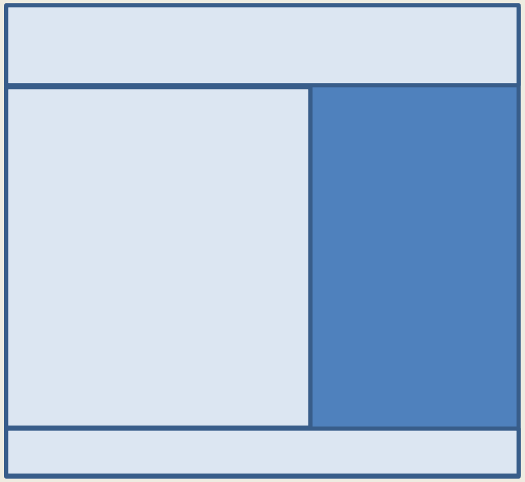
RE-ORIENTING

- Web infrastructure involves necessary complexity.
- Back-up/repo. Back-up/repo. Back-up/repo.
  - Never pull code from production server for editing.
  - Transfer to production server is a one-way trip.
- For many students, most difficult material is at beginning of course.
- What is the baseline set of styling expectations?

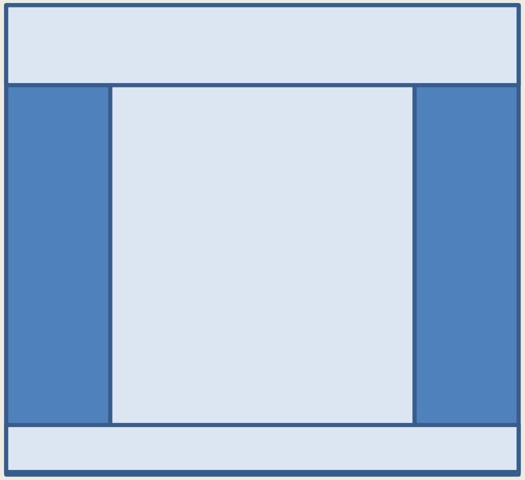
BASIC PAGE LAYOUTS



T-Frame



C-Frame

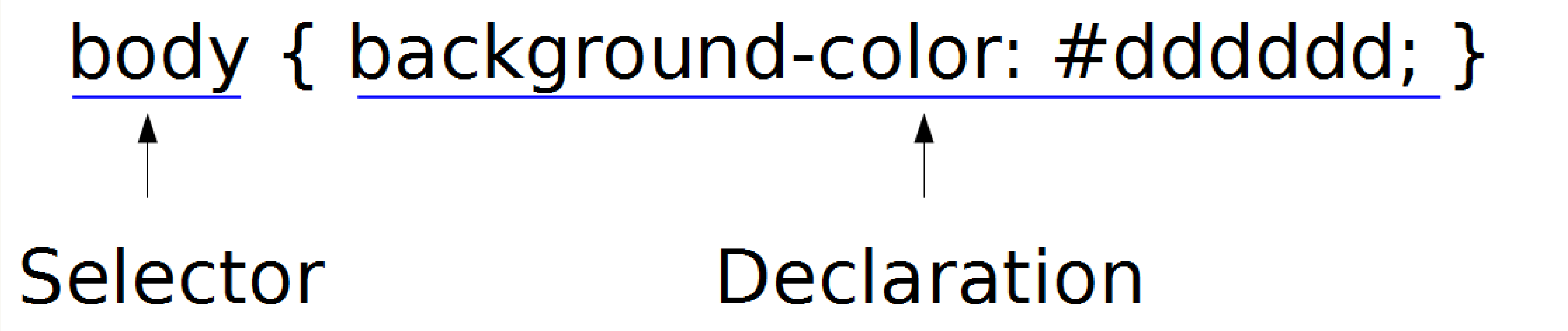


I-Frame

These are Steve-isms!

CSS VOCABULARY

- Cascading: browser default > user-defined > site
- Rule: describes style information for one or more elements.
- Selector: lists the elements to which the rule applies.
- Declaration: contains the styling information.



```
body { background-color: #dddddd; }
```

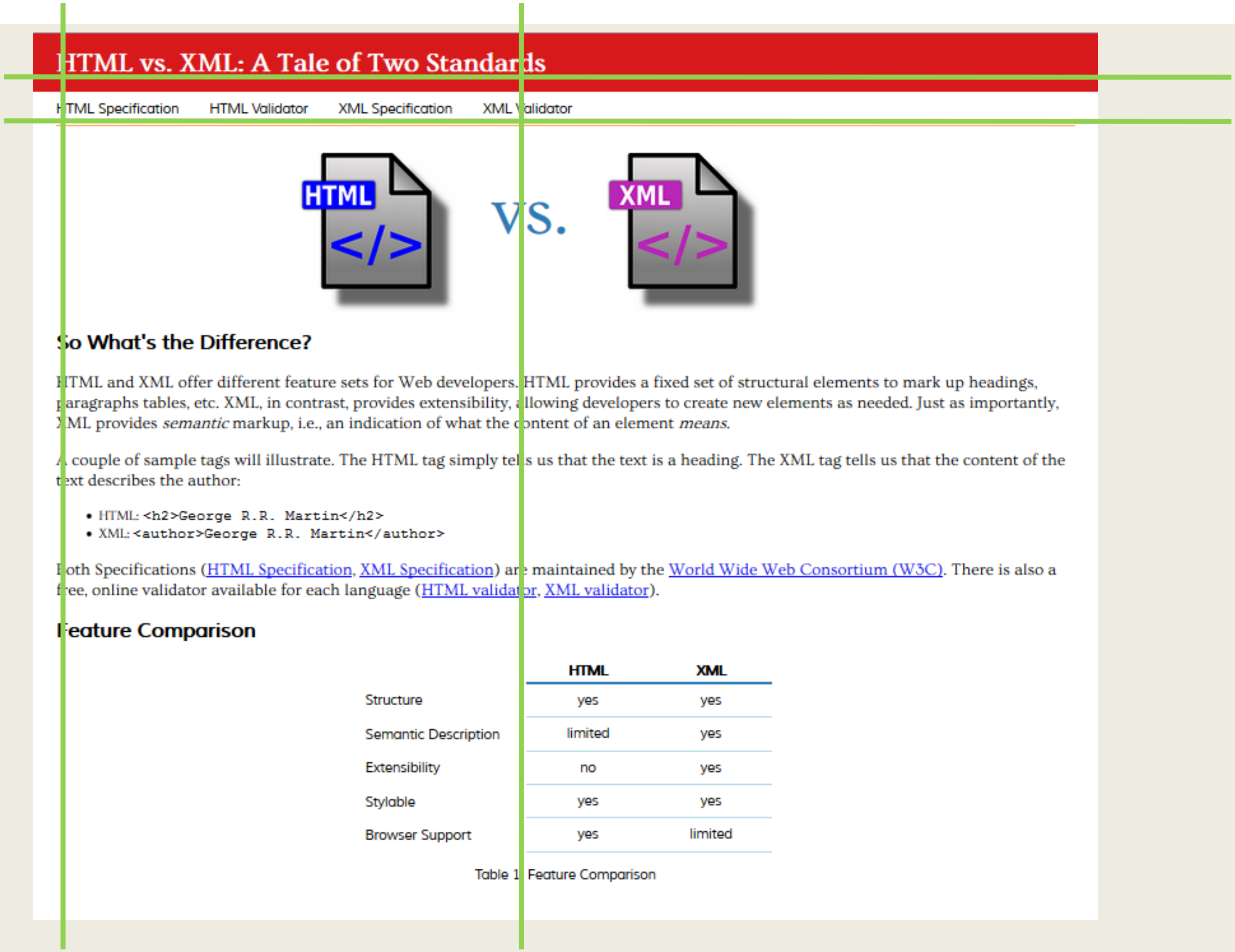
Selector

Declaration

GENERAL STYLING APPROACH

- NEVER allow horizontal scrolling of text.
- In a navigation bar, OK to style links.
- In body of text, use default link styling.
- Animation/interaction must serve a purpose beyond eye candy. Think of it this way:
  - This animation/interaction will allow users to…
  - This animation/interaction will inform users that…
  - It's fun the first time a user sees it. But by the 100th time?
- Avoid thick or prominent borders around images, tables, etc.
- Use accessible color pallets.

GRID MODEL



HTML vs. XML: A Tale of Two Standards

HTML Specification HTML Validator XML Specification XML Validator

So What's the Difference?

HTML and XML offer different feature sets for Web developers. HTML provides a fixed set of structural elements to mark up headings, paragraphs tables, etc. XML, in contrast, provides extensibility, allowing developers to create new elements as needed. Just as importantly, XML provides *semantic* markup, i.e., an indication of what the content of an element *means*.

A couple of sample tags will illustrate. The HTML tag simply tells us that the text is a heading. The XML tag tells us that the content of the text describes the author:

- HTML: `<h2>George R.R. Martin</h2>`
- XML: `<author>George R.R. Martin</author>`

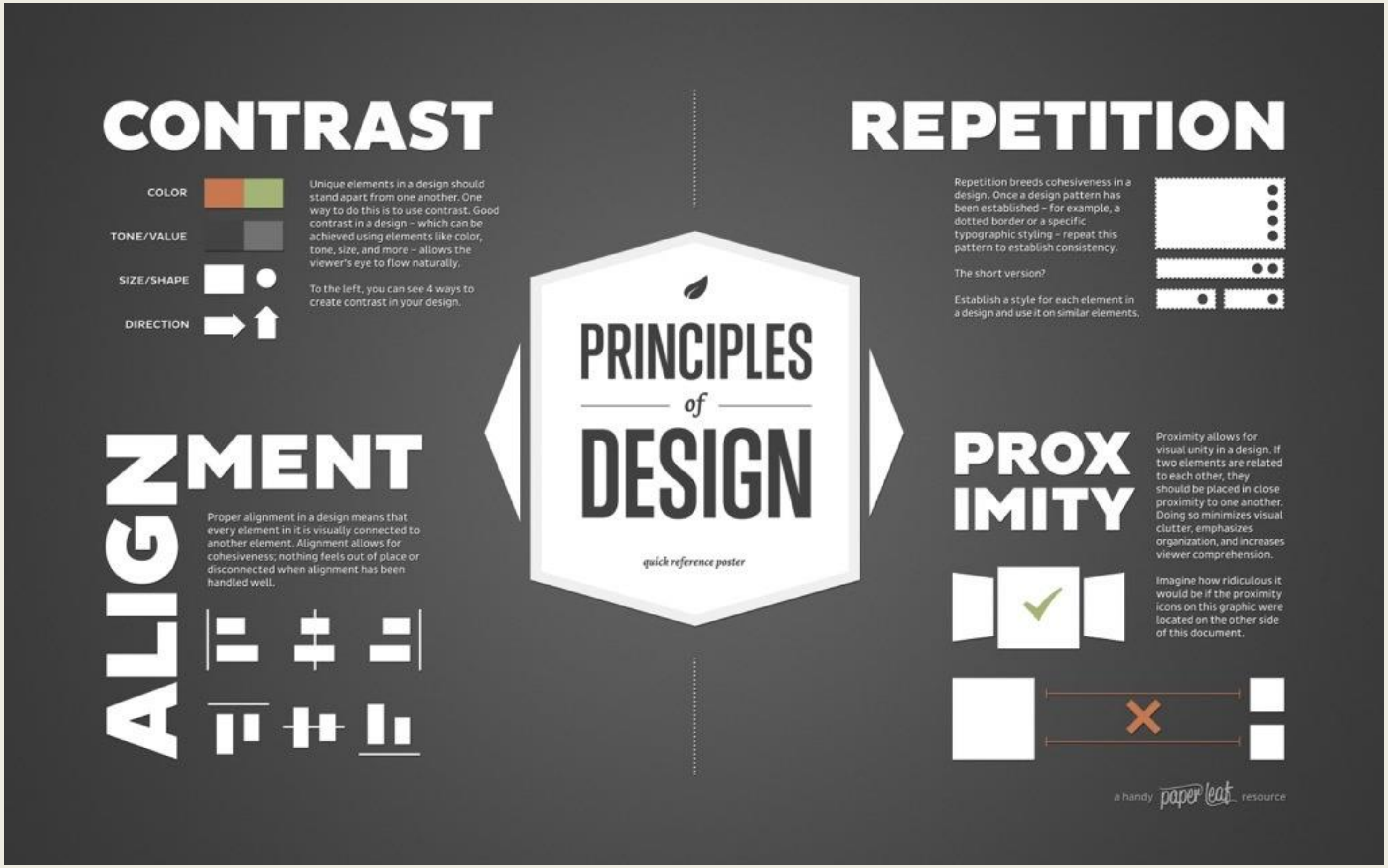
Both Specifications (HTML Specification, XML Specification) are maintained by the World Wide Web Consortium (W3C). There is also a free, online validator available for each language (HTML validator, XML validator).

Feature Comparison

	HTML	XML
Structure	yes	yes
Semantic Description	limited	yes
Extensibility	no	yes
Stylable	yes	yes
Browser Support	yes	limited

Table 1 Feature Comparison

CRAP!



CONTRAST

Unique elements in a design should stand apart from one another. One way to do this is to use contrast. Good contrast in a design – which can be achieved using elements like color, tone, size, and more – allows the viewer's eye to flow naturally.

To the left, you can see 4 ways to create contrast in your design.

REPETITION

Repetition breeds cohesiveness in a design. Once a design pattern has been established – for example, a dotted border or a specific typographic styling – repeat this pattern to establish consistency.

The short version?

Establish a style for each element in a design and use it on similar elements.

ALIGNMENT

Proper alignment in a design means that every element in it is visually connected to another element. Alignment allows for cohesiveness; nothing feels out of place or disconnected when alignment has been handled well.

PROXIMITY

Proximity allows for visual unity in a design. If two elements are related to each other, they should be placed in close proximity to one another. Doing so minimizes visual clutter, emphasizes organization, and increases viewer comprehension.

Imagine how ridiculous it would be if the proximity icons on this graphic were located on the other side of this document.

Image from: https://grantcoombs.wordpress.com/2013/02/14/principles-and-elements-of-design/

CSS BOX MODEL

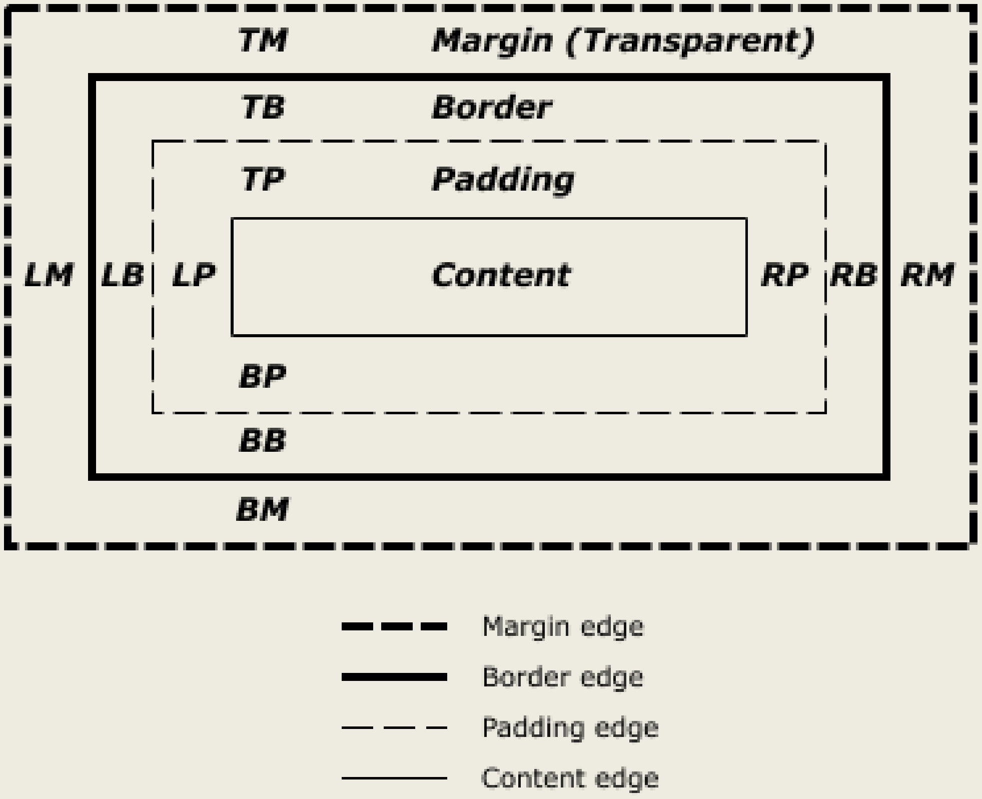


Image from: https://www.w3.org/TR/CSS2/box.html