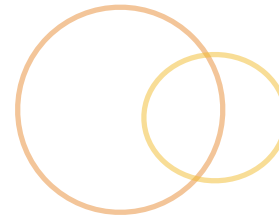
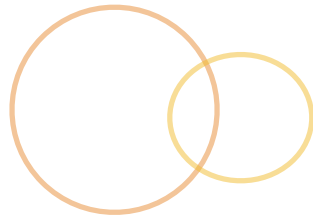


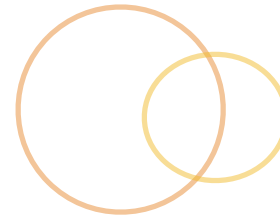
XHTML



Web Development

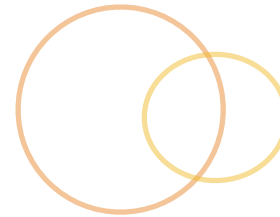


(X)HTML is ...



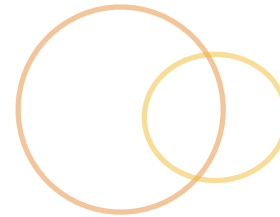
- ⦿ Hypertext Markup Language (HTML) / Extensible Hypertext Markup Language (XHTML)
 - ⦿ HTML - Language used to create web pages
 - ⦿ HT - text links to pages, images & other media
 - ⦿ ML - system for identifying and describing document components
 - ⦿ NOT a programming language or word-processing program
 - ⦿ eX - stricter syntax than simple HTML
 - ⦿ More on this later ...

(X)HTML is ...



- ⦿ Made of plain text files (.htm or .html extension)
- ⦿ Web Page Authoring (WYSIWYG):
 - ⦿ Dreamweaver (industry standard)
- ⦿ HTML Editors:
 - ⦿ Any text editor ...
 - ⦿ Edit Pad, TextPad, HTML-Kit (Windows)
 - ⦿ BBEdit, TextMate, JEdit (Mac)

(X)HTML is ...

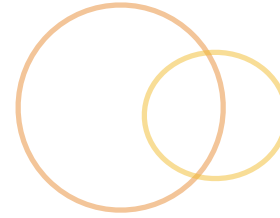


- ⦿ Overseen by the World Wide Web Consortium

- ⦿ www.w3.org:

- ⦿ founded 1994 by Tim Berners-Lee, inventor of the Web @ MIT
 - ⦿ go to www.w3.org/Consortium to see what they do
 - ⦿ lay foundation for the future of the web
 - ⦿ encourages browsers to follow standards

XHTML vs. HTML



⦿ (X)

- ⦿ Stricter / more rigorous (business suite type)...
 - ⦿ case-sensitivity
 - ⦿ closing tags
 - ⦿ enclosing attributes in quotation marks
 - ⦿ nice / clean / readable

⦿ HTML

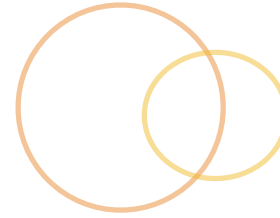
- ⦿ Laid back (Hawaiian shirt type)
 - ⦿ lets you get away with “lazy” coding
 - ⦿ can get messy
- ⦿ We'll be using XHTML 1.0 set by the W3C
 - ⦿ It will be a blend of the two called transitional

Valid (X)HTML

◎ DOCTYPEs

- ◎ HTML gone through 4 revisions
- ◎ Overtime the W3C has deprecated tags that deal with web page beauty
 - ◎ That is the responsibility of CSS
- ◎ Browsers have begun to play nice - complying better with the W3C standards.
 - ◎ However, continual frustration as differing browsers still render differing layouts

Valid (X)HTML



◎ DOCTYPEES

- ◎ is a short declaration found at the beginning of the (X)HTML document
- ◎ declares which version of (X)HTML the page is written in
- ◎ specifies set of allowable tags and attributes
- ◎ specifies their order of appearance
- ◎ XHTML
 - ◎ Strict, Transitional, Frameset
- ◎ HTML
 - ◎ Strict, Transitional or Loose, Frameset

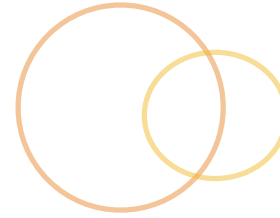
Valid (X)HTML

◎ DOCTYPE

◎ PayPal uses Transitional - Why?

- ◎ Enforces certain rules, yet allows us to certain officially frowned-upon strategies
- ◎ People don't like being "Framed", we aren't going to discuss them
- ◎ XHTML insistence on standards makes it more probable that browser will be able to display it
- ◎ Omitting the DOCTYPE makes IE function in quirks mode and can act funky

Valid (X)HTML



◎ DOCTYPES

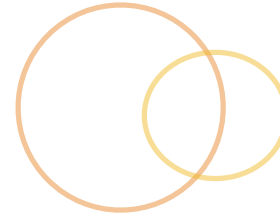
XHTML: Transitional

```
<!DOCTYPE html PUBLIC "-//W3C/DTD XHTML 1.0 Transitional//EN"  
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

HTML: Transitional / Loose

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"  
  "http://www.w3.org/TR/html4/loose.dtd">
```

(X)HTML.Basics



⦿ Basic elements

⦿ Element

- ⦿ term referring to an opening and closing tag along with everything in between

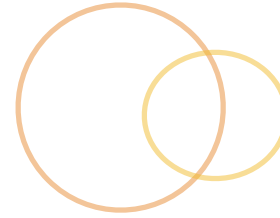
⦿ `<html> ... </html>` (html tags)

- ⦿ root element
- ⦿ everything nested within them

⦿ `<head> ... </head>`

- ⦿ contains info not rendered on the page
 - ⦿ `<title></title>` - displayed in title bar of browser
 - ⦿ `<meta />` - general page info & character set

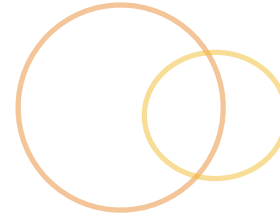
(X)HTML.Basics



- ◎ `<!--Your Text Here-->`
 - ◎ comment for you or another to understand code better
- ◎ `<body> ... </body>`
 - ◎ displayed content of the page

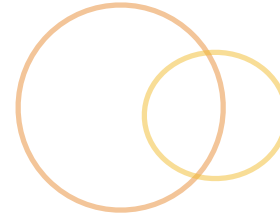
```
<html>
<head>
  <title>simple document</title>
  <meta />
  <!--Comments-->
</head>
<body>
  ...
  (contents to be displayed)
  ...
</body>
</html>
```

(X)HTML.Basics



- ⦿ all code written in lowercase
- ⦿ all open tags are closed with a “forward slash” (/)
- ⦿ using indented nested tags
 - ⦿ PayPal must (not a language must)
 - ⦿ whitespace is ignored in (X)HTML
 - ⦿ easier to read than writing all the elements on the same line

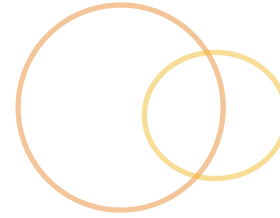
(X)HTML.Basics



⦿ Language Declaration

- ⦿ Recommended to supply in document
- ⦿ goes in <html> element
- ⦿ `<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">`
- ⦿ aids browsers and assistive devices in interpreting page

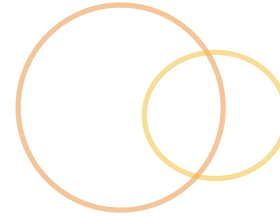
(X)HTML.Basics



- ⦿ use `<meta>` element
 - ⦿ goes in `<head>` along with the title

```
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1" />
```
 - ⦿ “http-equiv” attribute - providing information about the content type
 - ⦿ “content” attribute -
 - ⦿ “text/html;” - this is an HTML document (XHTML can look like HTML - don’t write XHTML here)
 - ⦿ “charset=ISO-8859-1”
 - ⦿ character encoding is Latin-1 - 256 characters mostly used in Western languages (standard HTML 2,3)
 - ⦿ could also use “utf-8” - unicode (includes characters for most know languages of the world - thousands of characters) standard HTML 4, XML, XHTML
 - ⦿ however you save your text in you text editor

(X)HTML Basics



◎ <meta> element

◎ “keywords” attribute

- ◎ `<meta name="keywords" content="HTML Active Server Pages" />`

◎ “description” attribute

- ◎ `<meta name="description" content="Develop Intelligence provides ..." />`

- ◎ search engines limit characters in description to 200

(X)HTML Basic Template



◎ The Template

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org//TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
  <title>Template</title>
  <meta http-equiv="Content-type" content="text/html; charset=ISO-8859-1" />
  <!--comments here-->
</head>
<body>

</body>
</html>
```

Exercise 1a

- ⦿ **Beginning an HTML document**

- ⦿ Time: 5 min

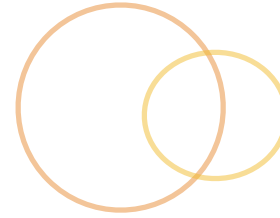
- ⦿ Page: 7

(X)HTML.Rules



- ⦿ docs must have a root node `<HTML>`
- ⦿ docs well formed
 - ⦿ proper nesting
- ⦿ element and attribute names must be in lower case
- ⦿ All elements that open must close
- ⦿ XHTML docs should start with XML declaration
 - ⦿ DON'T USE THIS YET!!!
 - ⦿ Some browsers will get confused by this
 - ⦿ `<?xml version="1.0" ?>`

(X)HTML.Rules



- ⦿ all attributes values must be in quotation marks
- ⦿ attributes must have values

```

```

- ⦿ XHTML is HTML
 - ⦿ Difference is that XHTML plays by the rules :)

Valid (X)HTML



- ◎ W3C provides online validator
 - ◎ Check to see if your code is good
 - ◎ Give error report if you did something wrong
 - ◎ leave off the “/”
 - ◎ forget closing tag
 - ◎ validator.w3.org
 - ◎ upload `xhtml/doctype/xhtmltransitional.html`
- ◎ PayPal standards validation suggestion
 - ◎ use users.skynet.be/mgueury/mozilla for local validation
 - ◎ <https://addons.mozilla.org/en-US/firefox/addon/60>
 - ◎ HTML documents must render and function w/o error on Tier 1 browsers

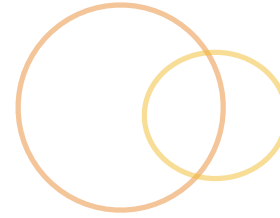
Exercise 1b

- ⦿ Structural XHTML Markup

- ⦿ Time: 5 min

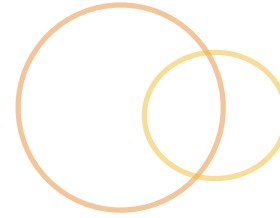
- ⦿ Page: 14

(X)HTML Sectioning



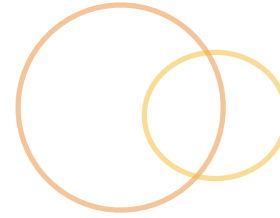
- ◎ block-level element
 - ◎ breaks flow of text before it and after it
 - ◎ an imaginary rectangle inserted in the text
 - ◎ i.e. `<div>`, `<p>`, `<h1>`
 - ◎ block-level elements can enclose a heading, paragraphs, links ...
- ◎ inline element
 - ◎ rendered without breaking text flow
 - ◎ tags like: ``, ``

(X)HTML Sectioning



- ◎ `<div>` - denote a section of a page
 - ◎ block-level element
 - ◎ use these only when you need them
 - ◎ used as handles for CSS to grab onto
 - ◎ other tags already in the code like `<p>` or `<h1>` may already be there to use - less code, less mess
- ◎ `` - defines smaller section of a document
 - ◎ marks up subset of a block-level element
 - ◎ used to mark up inline code (won't break text flow)
- ◎ Think if other tags could be used
 - ◎ would a heading tag work? a paragraph? strong or em element?

(X)HTML.Sectioning

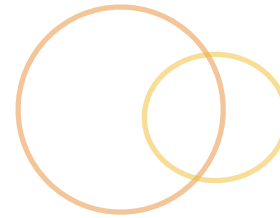


- ⦿ “id” attribute
 - ⦿ uniquely identifies the element
 - ⦿ allows us to know the purpose of this div - a meaningful div
 - ⦿ only 1 element can have a particular id

```
<div id="pageheading">  
<h1>Panda Tours</h1>  
<p>We provide ...</p>  
</div>
```

- ⦿ PayPal standards use “id” for
 - ⦿ header, navPrimary, content, footer, navFull

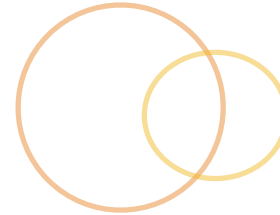
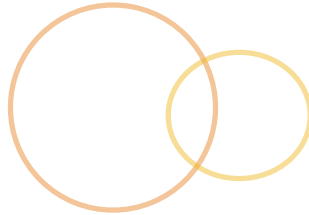
(X)HTML.Links



- ◎ Links to another location on same page
 - ◎ Link to the destination

```
<a href="#locations" alt="Company locations">Where are you located?</a>
.
.
.
<div id="locations">We are located in the following cities
  <ul>
    <li>Washington</li>
    <li>Detroit</li>
  </ul>
</div>
```

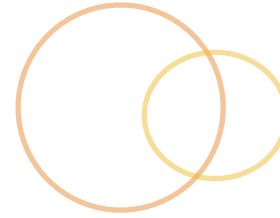
Browsers



⦿ Versions

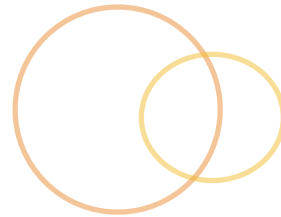
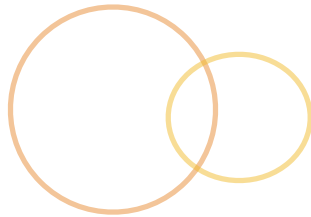
- ⦿ As of September 2007 - www.w3schools.com/browsers
 - ⦿ Internet Explorer 7 - 20.8%
 - ⦿ IE 6 - 34.9%
 - ⦿ IE 5 - 1.5%
 - ⦿ Firefox - 35.4%
 - ⦿ Mozilla - 1.2%
 - ⦿ Safari - 1.6%
 - ⦿ Opera - 1.5%

Browsers.Coping



- ◎ Standards...Standards...Standards
 - ◎ follow (X)HTML & CSS standards from W3C
- ◎ Start with good markup
 - ◎ write document in logical order
 - ◎ elements marked up in a meaningful way
- ◎ Don't use browser-specific (X)HTML
- ◎ Get familiar with problem CSS aspects

Browsers



⦿ Monitor Resolution

⦿ www.w3schools.com/browsers/browsers_display.asp

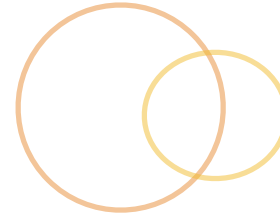
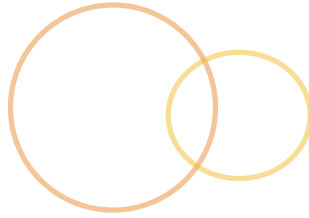
- ⦿ 640x480 - 0%
- ⦿ 800x600 - 14%
- ⦿ 1024x768 - 54%
- ⦿ Higher - 26%
- ⦿ Unknown - 6%

⦿ Check out what you look like

⦿ Browsercam - www.browsercam.com

- ⦿ allows you to see what your page looks like on different browsers on different platforms
- ⦿ catch stylesheet and markup problems

Exercise 2



- ⦿ Organizing an HTML Page with `<div>` and ``
 - ⦿ Time: 15 min
 - ⦿ Page: 20

HTML.PayPal Standards

