

CS 146: Intro to Web Programming and Project Development

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Introduction to HTML5 (II)



HTML Comments

- You can add comments to your HTML source by using the following syntax:
 - `<!-- Write your comments here -->`
- Comments are not displayed by the browser, but they can help document your HTML source code
- With comments you can place notifications, or reminders in your HTML
- Comments are also great for debugging HTML
 - You can comment out HTML lines of code to search for errors



HTML Links

- HTML links are hyperlinks
- You can click on a link and jump to another document
- When you move the mouse over a link, the mouse arrow will turn into a little hand
 - A link does not have to be a text; it can be an image or any other HTML element



HTML Links Syntax

- In HTML, links are defined with the **<a>** tag:
 - `link text`
- Example:
 - `Visit our Department *`
- The **href** attribute specifies the destination address (`http://www.w3schools.com/html/`) of the link
- The **link text** is the visible part
- Clicking on the link text will send you to the specified address



HTML Local Links

- The example above used an absolute URL (A full web address)
- A local link (link to the same web site) is specified with a relative URL (without http://www....)
- Ex:
 - `Download my resume!`



HTML Links Target Attribute

- The **target** attribute specifies where to open the linked document
- The target attribute can have one of the following values:
 - `_blank` - Opens the linked document in a new window or tab
 - `_self` - Opens the linked document in the same window/tab as it was clicked (this is default)
 - `_parent` - Opens the linked document in the parent frame
 - `_top` - Opens the linked document in the full body of the window
 - `framename` - Opens the linked document in a named frame
- Ex:
 - ` Visit our Department *`



HTML Images

- In HTML, images are defined with the **** tag
- The **** tag is empty, it contains attributes only, and does not have a closing tag
- The **src** attribute specifies the URL (web address) of the image
 - ``
 - The **alt** attribute provides an alternate text for an image, if the user for some reason cannot view it (because of slow connection, an error in the **src** attribute, or if the user uses a screen reader)
 - If a browser cannot find an image, it will display the value of the **alt** attribute



HTML Images

- Ex:
 - ``
- You can use the **style** attribute to specify the width and height of an image; the values are specified in pixels (use px after the value)
- Alternatively, you can use the **width** and **height** attributes; here, the values are specified in pixels by default:
 - ``



Width and Height or Style?

- **Always specify the width and height of an image; if width and height are not specified, the page will flicker while the image loads!**
- Both the width, height, and style attributes are valid in HTML5
- However, the style attribute prevents internal or external styles sheets (CSS) from changing the original size of images



HTML Attributes

- All HTML elements can have **attributes**
- Attributes provide **additional information** about an element
- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs like: **name="value"**
- Examples we've seen already:
 - href, width, height, alt, src



The lang Attribute

- The language of the document can be declared in the **<html>** tag
- The language is declared with the **lang** attribute
- Declaring a language is important for accessibility applications (screen readers) and search engines:
- ```
<!DOCTYPE html>
<html lang="en-US">
<body>

...

</body>
</html>
```



# The title Attribute

- Here, a **title** attribute is added to the `<p>` element
- The value of the title attribute will be displayed as a tooltip when you mouse over the paragraph:
- `<p title="I'm a tooltip">`  
This is a paragraph.  
`</p>`



# HTML Attributes Suggestion!

- The HTML5 standard does not require lowercase attribute names
- The title attribute can be written with uppercase or lowercase like **Title** and/or **TITLE**
- **It is recommend** to use lowercase in HTML and **demanded** to use lowercase for stricter document types like XHTML



# HTML Tables

- An HTML table is defined with the **<table>** tag
- Each table row is defined with the **<tr>** tag
- A table header is defined with the **<th>** tag
- By default, table headings are bold and centered
- A table data/cell is defined with the **<td>** tag
  - To make a cell span more than one column, use the **colspan** attribute
  - To make a cell span more than one row, use the **rowspan** attribute
- To add a caption to a table, use the **<caption>** tag



# Create an HTML Table!

Monthly savings

Month	Savings
January	\$100
February	\$50





# HTML Lists

- Ordered Lists: `<ol>...</ol>`
- Unordered Lists: `<ul>...</ul>`
  - Every item in the list should be wrapped in `<li>...</li>`
- Description Lists:
  - The `<dl>` tag defines the description list
  - the `<dt>` tag defines the term (name), an
  - the `<dd>` tag describes each term



# Create Lists!

## An ordered HTML list

1. Coffee
2. Tea
3. Milk

## A Description List

Coffee

- black hot drink

Milk

- white cold drink