

# Logols Learning

WEEKEND WEB DEVELOPMENT BOOT CAMP

TRAINING: HTML

# Elements

- ▶ Elements are the objects in a page
- ▶ Have a start and an end tag
- ▶ Can be nested if the definition allows it
- ▶ Can have a value between the tags
- ▶ Empty elements do can have / instead of ending tag
- ▶ Use lowercase even though not case sensitive

Example:

```
<html>
  <body>
    Welcome to the page.
    <br />
  </body>
</html>
```

- Elements define the objects on a page.
- They have a start and an end tag.
- Values and other elements can be nested inside the element
- Empty elements, those that don't have anything between the begin and end tag can have a / at the end and not use an end tag.
- Lowercase is the standard for elements.

# Attributes

- ▶ Attributes are properties associated with an element
- ▶ Located in the start tag
- ▶ Have the syntax **name="value"**

Example:

```
<p title="My Header">  
    Welcome to the page.  
</p>
```

- Attributes are properties associated with an element.
- They go in the start tag and are written with the attribute name = to the value.
- This is an example of the title attribute being set on the p element.

# Comments

► Syntax: <!-- ... -->

Example:

```
<!-- Comments here, everything commented until  
end comment  
<p>  
    Some text that won't show up  
</p>  
-->
```

- Comments in html are represented with this syntax <!-- comment -->
- Here is an example.

# DocType

- ▶ First in the HMTL file
- ▶ Instructs the browser the version of HTML that is used
- ▶ Types:
  - ▶ HTML 5
  - ▶ HTML 4.01 Transitional
  - ▶ HTML 4.01 Frameset
  - ▶ Etc...
- ▶ Example: <http://html.com/tags/doctype/>

- The DocType is that first part of the HTML page.
- It tells the browser which version of HTML it is.
- Let's see the examples..
- For HTML 5 you just specify html.

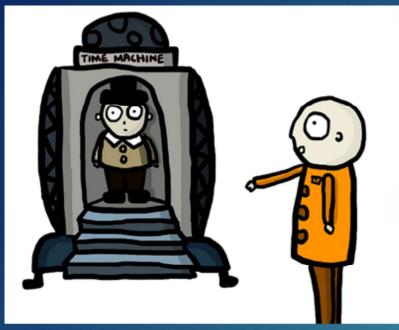
# Basic Structure

- ▶ DocType
- ▶ Html
- ▶ Head
- ▶ Body

Example:

```
<!DOCTYPE html>
<html>
<head>
<title>
  My title
</title>
</head>
<body>
  Welcome to the page.
  <br />
</body>
</html>
```

- This is the structure of a basic html page.
- The DocType element is specified first.
- Then you have the html element.
- Inside the html element is the head element.
- After the head element is the body element inside of the html element.
- The other page elements will go in the body.



## EXAMPLE

BASIC HTML STRUCTURE

# ASSESSMENT

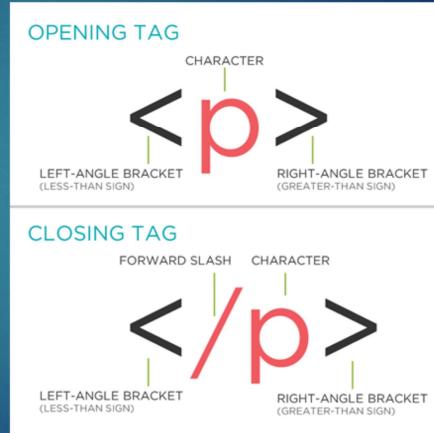
BASIC HTML STRUCTURE



- What is the name of objects on the page?
- What are properties associated with an element called?

# Common Elements

- ▶ div
- ▶ span
- ▶ p
- ▶ h1, h2, h3, h4, h5, h6
- ▶ br
- ▶ hr



- Here are some common elements that you will see over and over again.
- Div provides an empty container to be styled.
- Span also provides an empty container to be styled, but inline.
- p represents a paragraph
- h1, h2, h3, h4, h5, and h6 are different sizes of headings.
- br represents a break
- hr represents a horizontal line

# Images

- ▶ Represented by the `img` element
- ▶ Attributes:
  - ▶ `src`
  - ▶ `alt`
  - ▶ `width`
  - ▶ `height`
  - ▶ `style`
  - ▶ `Usemap`

Example:

```

```

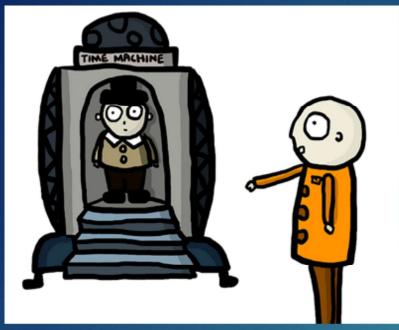


- The `img` element represents an image on the page.
- Here is an example of the element.
- There is a `src` attribute that defines where the image is in reference to the page.
- The `alt` attribute is text that shows if the image cannot be displayed for some reason.
- There is a `width` and `height` also, but it is recommended to use the `style` instead.

# Semantic Elements

- ▶ article
- ▶ aside
- ▶ details
- ▶ figcaption
- ▶ figure
- ▶ footer
- ▶ header
- ▶ mark
- ▶ nav
- ▶ section
- ▶ summary
- ▶ Time
- ▶ main

- There are a number of elements that just exist to help make the page more semantic.
- This means that the elements are describing what is inside the element.
- This means that not only does the page work for users to use it in a browser, but it can also be used by other machines to read the page and figure out what to do with the text based upon what semantic element it's in.

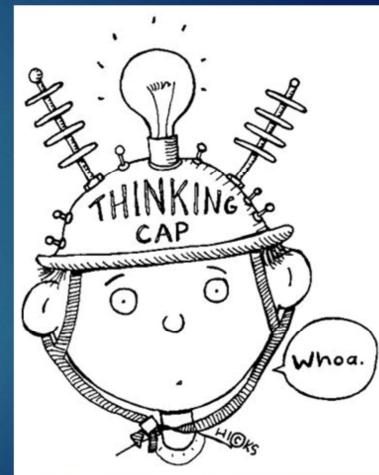


EXAMPLE

IMAGES

# ASSESSMENT

PARAGRAPH AND IMAGES



- Write on the board a paragraph with text “this is a paragraph”.
- Write on the board an image that exists in the img folder named profile.gif

## Assignment

- ▶ Write an interface for our status report.
- ▶ Write the basic html structure with header text and title of “Zombie Status Report”.
- ▶ Under the title, link to an image that you find online or have on your computer.
- ▶ Under the image add a paragraph tag describing the report.

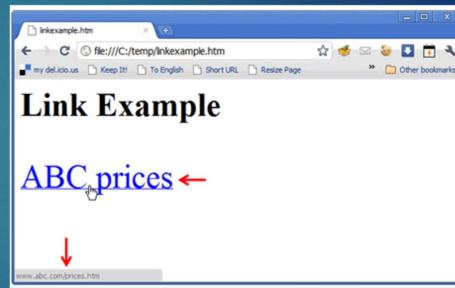


# Links (Hyperlinks)

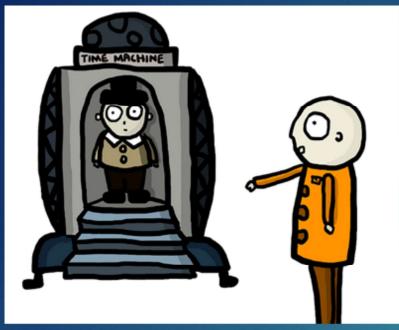
- ▶ Represented by the `a` Element
- ▶ Attributes:
  - ▶ `Href`
- ▶ Absolute Path
  - ▶ `http://www.google.com`
- ▶ Relative Paths
  - ▶ `About.html`
  - ▶ `../About.html`
  - ▶ `./Company/About.html`

Example:

```
<a href="http://www.google.com">Google Link</a>
```



- Links are represented by the `a` element.
- The `href` attribute specifies the location of the link.
- The text of the link goes between the tags.
- The paths can be specified in multiple ways.
- An absolute path can be specified with the full url.
- Or a relative path can be used in reference to the page that the link is displayed on.
- The relative path is recommended if the link is hosted within the same site.



## EXAMPLE

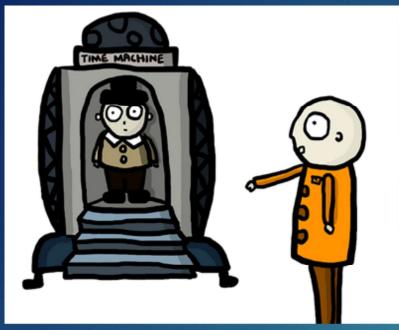
LINKS

# Tables

```
<table>
  <thead>
    <tr>
      <th>First Name</th>
      <th>Last Name</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>John</td>
      <td>Smith</td>
    </tr>
    <tr>
      <td>Tom</td>
      <td>Jones</td>
    </tr>
  </tbody>
</table>
```

| Product ID | Product Name | Product Quality | Product Quantity |
|------------|--------------|-----------------|------------------|
| 1          | Wheat        | Good            | 200 Bags         |
| 2          | Rice         | Good            | 250 Bags         |
| 3          | Sugar        | Good            | 200 Bags         |

- The table element represents a table as you might imagine.
- There is a thead element that represent the header and a tbody element that represents the body of the table.
- The footer is represented by the tfoot element.
- These are optional.
- Inside the table the tr element represents a table row.
- Each column is represented by th in the header and td in the body.



## EXAMPLE

TABLES

# Form Elements

- ▶ form
  - ▶ Attributes: action, method, autocomplete, name, novalidate, target, accept-charset
  - ▶ Methods: get, post
- ▶ Input
  - ▶ Attributes: type, name, value
  - ▶ Types: text, radio, checkbox, submit, select
- ▶ fieldset
- ▶ legend

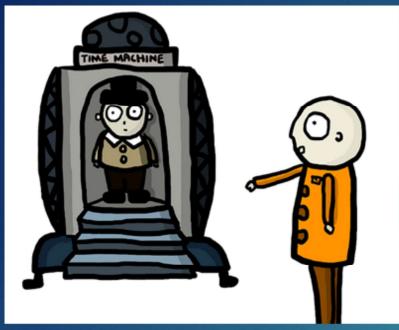
- The form is the standard way for the page to submit data to the server.
- Everything is surrounded by the form element start and end tags.
- Within the form tags are input elements.
- Different types can be specified for the input such as text for a textbox, radio for radio buttons, checkbox for checkboxes, and submit for the submit button.
- The fieldset can be used to semantically describe where form fields are.

# Forms

Example:

```
<form action="/formAction.html" method="post">
    First Name:<br />
    <input type="text" name="firstName" value="First" />
    Last Name:<br />
    <input type="text" name="lastName" value="Last" />
    <input type="checkbox" name="signUp"
        value="SignedUp" />
    Sign Up?<br />
    <input type="submit" value="Submit" />
</form>
```

- Here's a quick example of a form.



## EXAMPLE

### FORMS

# ASSESSMENT

LINKS, TABLES, AND FORMS



- Write on the board a link to Google's site with text “search engine”
- Write on the board a table with two columns, a header, and two rows. Put in whatever text you would like.
- Write on the board a text box with an id “LastName”

# Assignment

- ▶ Write an interface for our status report.
- ▶ Under the paragraph add a table with a header that has 4 columns: First Name, Last Name, Status Id, and Status. Fill in some rows with data.
- ▶ Create a new page with form fields First Name (text), Last Name (text), and Status (drop down).
- ▶ Under the table add a link to open the new page with text, “Add”.



# QUICK REVIEW

HTML



- What is the name of objects on the page?
- What are properties associated with an element called?
- Write on the board a paragraph with text “this is a paragraph”.
- Write on the board an image that exists in the img folder named profile.gif
- Write on the board a link to Google’s site with text “search engine”
- Write on the board a table with two columns, a header, and two rows. Put in whatever text you would like.
- Write on the board a text box with an id “LastName”

## Additional Resources

- ▶ MDN Tutorial
  - ▶ <https://developer.mozilla.org/en-US/docs/Learn/HTML>
- ▶ JSFiddle
  - ▶ <https://jsfiddle.net/>
- ▶ free Code Camp
  - ▶ <https://www.freecodecamp.org/>