HTML Fundamentals

Web Authoring and Design

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Outline

- Review Previous Material
- HTML Tables, Forms and Frameworks
- Summary
- Review/Discussion

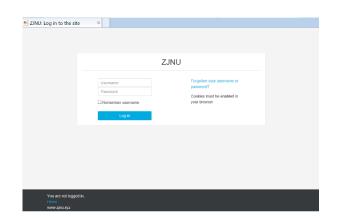
Email?

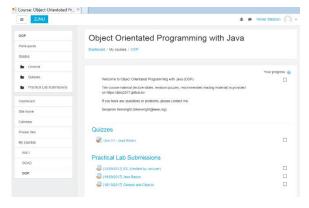
- Did everyone get an email from me yesterday (Tuesday)?

Submissions/Quizzes

- Course material (Public)
 - https://zjnu2017.github.io/
- Submissions/Quizzes (Graded/Private)
 - ><u>www.zjnu.xyz</u>

 - ▶Password Emailed





Why Online Quizzes?

- Take the quizzes as many times as you want
- Opportunity to `improve' learn from mistakes (instead of a single pass/fail)
- Quizzes contribute to your final mark
- 10-20 multiple choice questions added each week
- Straightforward and help prepare for the final exam

Why Online Coursework Submissions?

- Experiment/project submission should be submitted online
- Single .zip for each `task' ▷ Specified this week
- Lets me provide feedback, guidance and comments which you can review

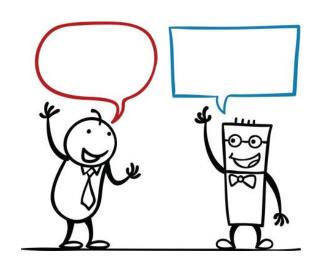
Submit GitHub URL

- This week submit GitHub URL Online
- For example:
 - >"https://name.github.io"

 - Structure (folders/images/..)

Discussion Activity

- ■What is the best webpage on the internet?
- Share examples of interesting website and `what' makes them `amazing'?



Review Question

■ Basic syntax for XHTML tags and attributes is:

- a. <tag attribute=value> </tag>
- b. <tag attribute=value> <tag>
- ■c. <tag attribute="value"> <tag>
- ■d. <tag attribute="value"> </tag>

Answer

■Answer: d

Review Question

What is the correct HTML for inserting an image?

- a.
- ■b. <image src="image.gif">
- c. image.gif
- ■d.

Answer

■Answer: d

Meta Data Tags

- Located in the <head></head> section
- Useful for search engines/classification
 - ><meta name="author" content="your name" />
 - ><meta name="description" content="" />
 - ><meta charset="UTF-8">

Redirection

- Meta tags can be used to perform the task of HTTP headers like redirection and refresh
 - ><meta http-equiv="refresh"
 content="5;url=http://www.bing.com/">
- Content attribute refers to the time interval in seconds before the refresh is performed and redirected

Forms

- Add interactivity to your web documents by way of the <form> tag
- Form tag you can add to your web pages a guestbook, order forms, surveys, get feedback

Form Tags

- Basic construction of a HTML form is this...
 - ><form> begin a form
 - ><input> ask for information in one of several different ways
 - <input> there can be as many input areas as you wish
 - ></form> end a form

Form Example

```
<form name="myform" action="server.php" method="post">
<input type="checkbox" /> Checkbox 1<br/>
<input type="text" /> Text Field 1<br/>
<input type="submit" value="SUBMIT" />
</form>
```

```
Checkbox 1
Text Field 1
SUBMIT
```

Form Method

GET

- contains all of the form information encoded as part of the address
- http://example.com/foo.html?bar=some+data&baz=test%2B%3D%5Bdata%5D

POST

- Encodes and passes the data with the html request

HTML Form Controls

- Different types of form controls that you can use to collect data using HTML form:
 - >Text Input Controls

 - >Select Box Controls
 - >File Select boxes
 - >Hidden Controls

 - Submit and Reset Button

Form Attributes & Descriptions

- type
 - Indicates the type of input control and for text input control it will be set to text.
- name
 - Used to give a name to the control which is sent to the server to be recognized and get the value
- value
 - This can be used to provide an initial value inside the control.
- size
 - Allows to specify the width of the text-input control in terms of characters.
- maxlength
 - Allows to specify the maximum number of characters a user can enter into the text box.

Hidden Form Controls

- Hidden form controls are used to hide data inside the page
 - ⊳e.g., pass information in the submission
 - ><input type = "hidden" name = "pagename" value = "10" />

HTML Input Elements

```
<form name="myform" action="mailto:youremail@email.com"</pre>
method="post">
 Check Me: <input type="checkbox" /><br />
 Name: <input type="text" value="David" /><br />
 Yes: <input type="radio" /> No: <input type="radio" /><br />
 <input type="submit" value="Send" />
 <input type="reset" value="Clear" />
</form>
                 Check Me:
                 Name: David
                 Yes:
                        No:
                  Send
                        Clear
```

Managing Form Submission

- Active Server
- Javascript
 - Show examples of this later in the course when we start working with Javascript

Taste of Javascript to Come

```
Try this HTML out...
<HTML>
<HEAD>
<TITLE>Test Input</TITLE>
<SCRIPT LANGUAGE="JavaScript">
function testResults (form) {
  var TestVar = form.inputbox.value;
  alert ("You typed: " + TestVar);
</SCRIPT>
</HEAD>
<BODY>
 <FORM NAME="myform" ACTION="" METHOD="GET">Enter something in the box: <BR>
 <INPUT TYPE="text" NAME="inputbox" VALUE=""><P>
 <INPUT TYPE="button" NAME="button" Value="Click" on Click="testResults(this.form)">
 </FORM>
</BODY>
</HTML>
                               Notice that the form has no action="
                               attribute. Without that attribute, the form will
```

submit to the same web page that contains the form

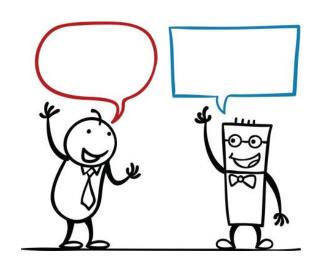
Example

```
<html>
<form name="myForm">
     <input type="button" name="mybutton" value="Press
Me" onClick="alert('Hello World')">
     </form>
     </html>
```

Note key attributes of a form (i.e., type, name, value, ..)

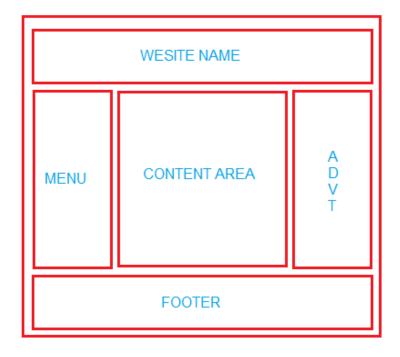
Discussion Activity

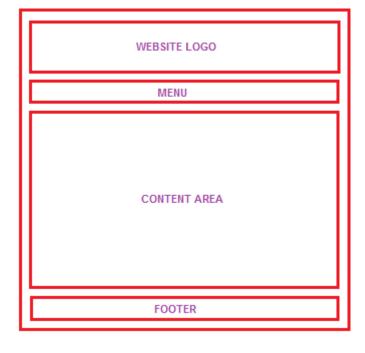
- Explain from your own experience where you would use forms?
- ■E.g., where on your website would you have a form?



Tables & Website Layouts

Shows an image of a simple website layout using html tables



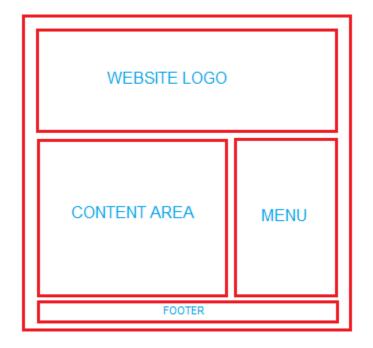


Tables & Layout

- Tables are supported older browsers
- Simple and easy to implement
 - Can become complex for more intricate websites (i.e., we'll talk about CSS scripts later)
 - For instance, when creating a website layout, it is better to avoid *nested tables*. Nesting tables can lead to complex tables layouts and increase in page load time.

Example

- website logo
- content area
- navigation options on the right side
- Interpretation for the bottom location (copyright/details)



```
Try this HTML out...
<html>
<head></head>
<body >
   <br><br><br><br>>
           WEBSITE NAME
           <br><br><br><br><
       You Can write your main content here
        MENU
        <br>
        FOOTER
       <br/>/td>
   </body>
</html>
```

Practical Task

- This Weeks Practical Exercises
 - Create a website using only 'Tables'
 - Control the table widths/heights

Question

Form attribute type for hiding data is:

- a) secret
- b) blank
- c) hidden
- d) passive
- e) mask

Answer

c) hidden

<input type="hidden" name="pagename" value="10" />

Interesting HTML Tags (Audio)

Sound

- ><audio loop autoplay id="audio-example">
 <source src="/wp content/uploads/flamingos.mp3"> </audio>
- Add controls attributes for letting the user control the sound (stop/start/volume)

Preview Audio & Javascript

```
<!DOCTYPE html>
<html>
<body>
<audio id="player" src="horse.mp3"></audio>
 <br/><br/>>
 <button onclick="document.getElementById('player').play()">Play</button>
  <button onclick="document.getElementById('player').pause()">Pause</button>
  <button onclick="document.getElementById('player').volume+=0.1">Volume Up</button>
  <button onclick="document.getElementById('player').volume-=0.1">Volume Down</button>
</body>
</html>
```

Interesting HTML Tags (Background Image)

```
<!-- Add background image to your page -->
<html>
<head>
                                               Preview of CSS
 <style type="text/css">
   body {background-image:url(myimage.gif);}
 </style>
</head>
<body>
   Hello
</body>
</html>
```

Interesting HTML Tags (Tool Tips)

```
<span title="See, this is the tooltip.
:)">Move your mouse over me!</span>
```

Move your mouse over See, this is the tooltip. :)

Question

An acronym for Joint Photographic Experts Group; refers to a type of file format used for images that appear on web pages. Many photographs are saved with the JPEG file format.

- a) jpg
- b) powder
- c) png
- d) view

Answer

■a) jpg

Question

Web page content that does not change or allow user interaction has dynamic content

- a) True
- b) False

Answer

■b) False

This Week

- Review Slides
- Read Associated Chapters
- Update Website (GitHub)
 - Submit your GitHub URL
 - ><u>www.zjnu.xyz</u>
- Online Quizzes
- Practical Tasks

Summary

- HTML Tables, Forms and Frameworks
- Version Control
- Hands-On/Practical

Questions/Discussion