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)?
  - ▷ Login details quizzes/submissions

Submissions/Quizzes
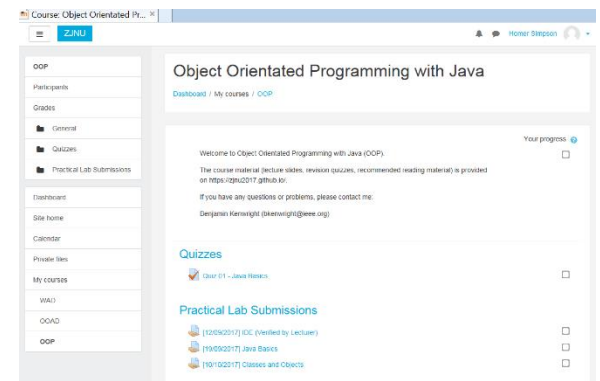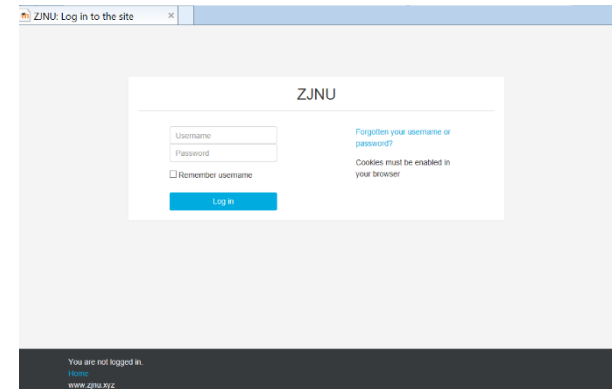
◼ Course material (Public)

▷ https://zjnu2017.github.io/

◼ Submissions/Quizzes (Graded/Private)

▷ www.zjnu.xyz

▷ (Login – Student No)

▷ 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
- Enables you access to your coursework
  - ▷ (e.g., you can review it regularly/backed up)
- 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"
  - ▷ Valid default page (index.html)
  - ▷ Structure (folders/images/..)

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. <img href="image.gif>

■ b. <image src="image.gif">

■ c. <img>image.gif</img>

■ d. <img src="image.gif">

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
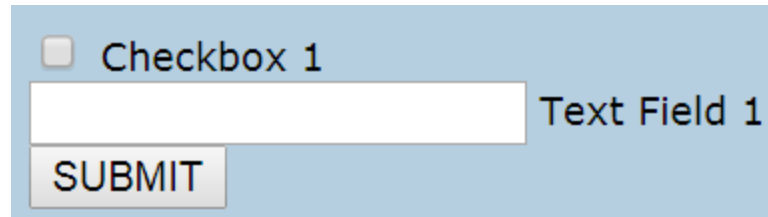
▷ <input> - ask for information in one of several different ways

▷ <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>
```

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

  ▷ has limitations

■ POST

  ▷ Larger files

  ▷ 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
- ▷ Checkboxes Controls
- ▷ Radio Box Controls
- ▷ Select Box Controls
- ▷ File Select boxes
- ▷ Hidden Controls
- ▷ Clickable Buttons
- ▷ 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"
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>
```
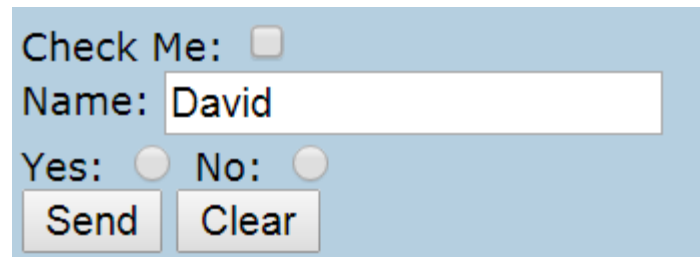
Managing Form Submission

■ Active Server

▷ .php, .python

■ 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" onClick="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
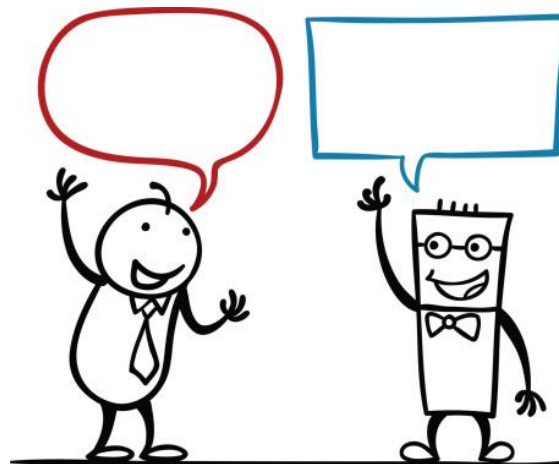
Example

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

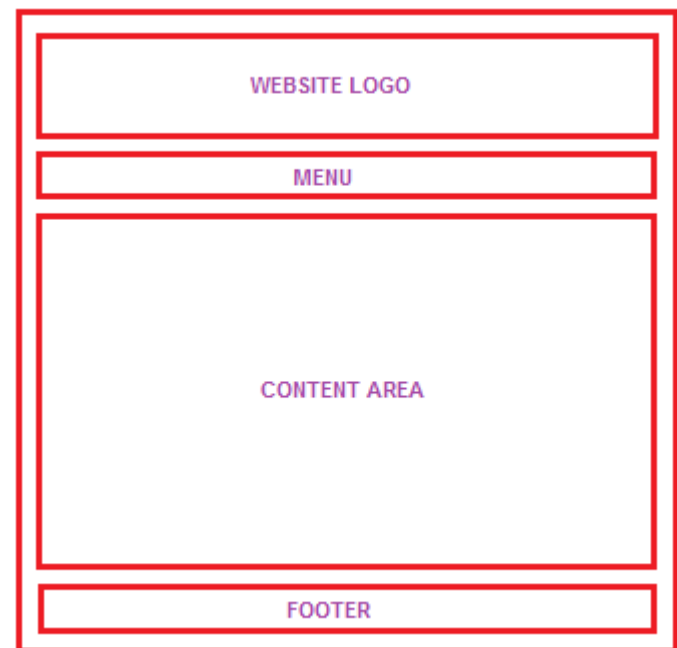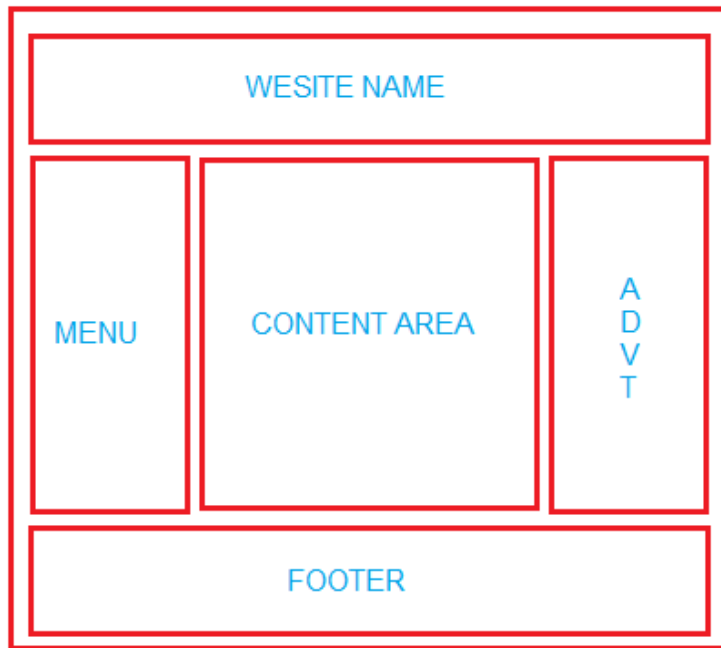Note key attributes of a form (i.e., type, name, value, ..)

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
- footer at the bottom location (copyright/details)

WEBSITE LOGO

CONTENT AREA

MENU

FOOTER

Try this HTML out…

```html
<html>
<head></head>
<body >
        <table border=2 bordercolor=red width=98% align=center>
                <tr><td align=center colspan=2>
                        <br><br><br>
                        WEBSITE NAME
                        <br><br><br>
                </td></tr>
                <tr><td  width=70% align=center>
                    <br><br><br><br><br><br><br><br><br><br><br>
                    You Can write your main content here
                    <br><br><br><br><br><br><br><br><br><br><br>
                </td><td  width=30% align=center>
                    MENU
                </td></tr>
                <tr><td align=center colspan=3> <br>
                    FOOTER
                <br></td></tr>
        </table>
</body>
</html>
```
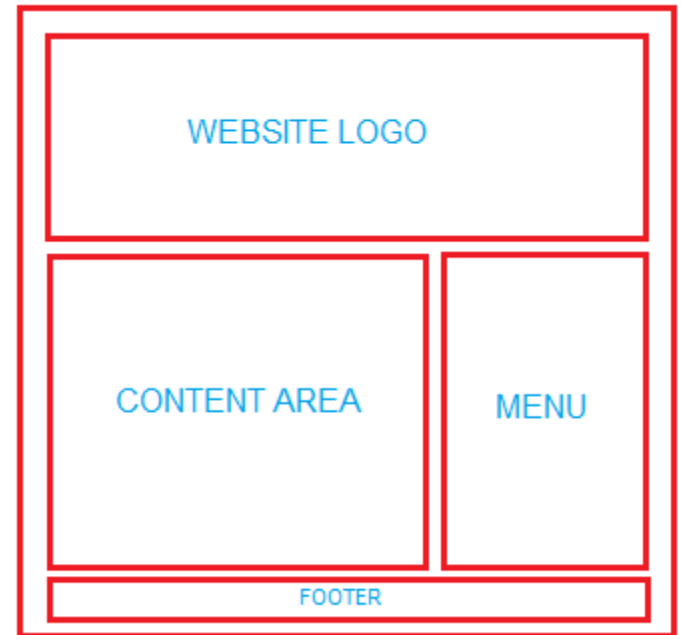
Practical Task

■ This Weeks Practical Exercises

▷ Create a website using only `Tables'

▷ Control the table widths/heights

▷ Background images for cells

▷ Upload your Table webpage GitHub

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)

Interesting HTML Tags (Background Image)

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

<body>
    Hello
</body>
</html>
```

http://www.w3school.com.cn/tiy/t.asp?f=csse_background-image

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
  - ▷ www.zjnu.xyz

- Online Quizzes

- Practical Tasks
  - ▷ Table Layout Webpage

Summary

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

Questions/Discussion