

WEB1100: Lecture 9

Web Development & HCI

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Agenda for today

- Responsive Web Design
- Web Forms



Responsive Web Design

- Mobile first: focuses on visualizing critical content
 - screen layout to one column
 - less navigation choices
 - limited file size
- shorter URL lengths
- less usage of frames, flash and tables
- extensive testing of the application

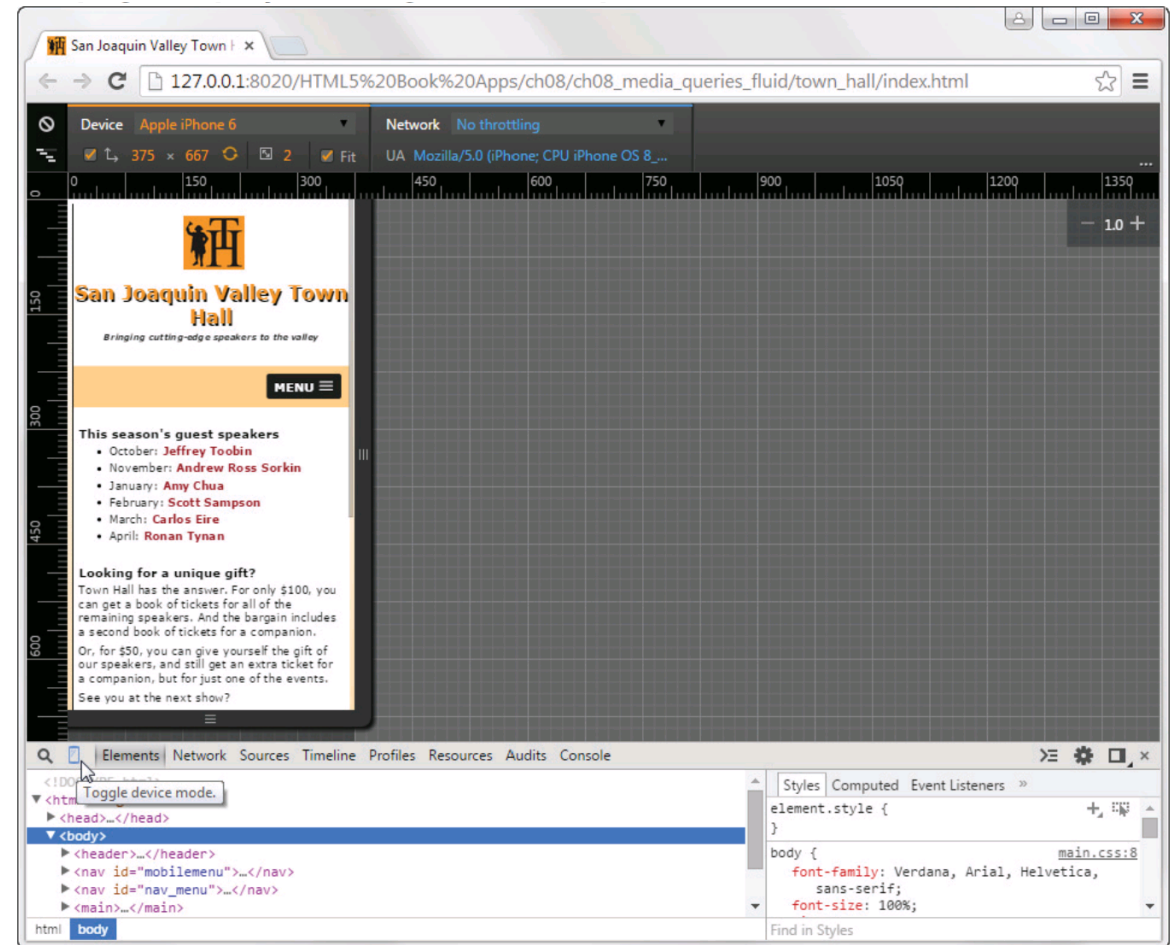


Responsive Web Design

- Three main components:
 - fluid layout: adjust the web application to the screen
 - uses relative properties: % or ems
 - media queries: adjust the appearance of the web application
 - condition checking for the screen-size
 - scalable images: adjust it to its containing element
 - relative to the container holding the image

Responsive Web Design

- Test your designs:
 - on your device
 - on device emulator
 - on browser simulator
 - on developer tool



Responsive Web Design

- CSS Media queries:

- set the viewport

A meta element that sets viewport properties

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

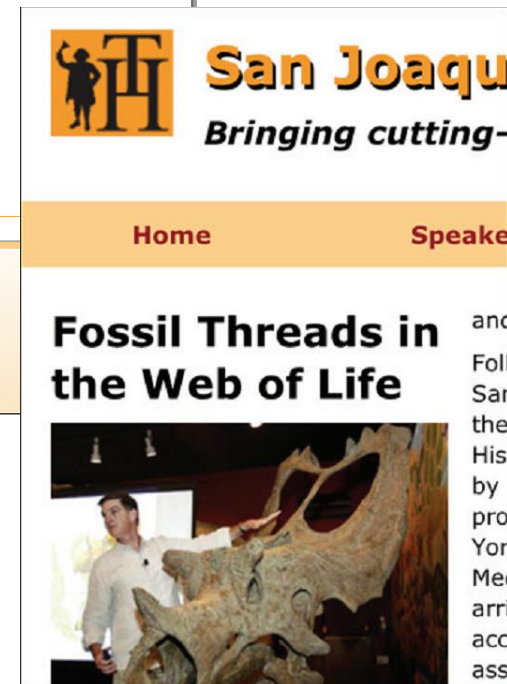
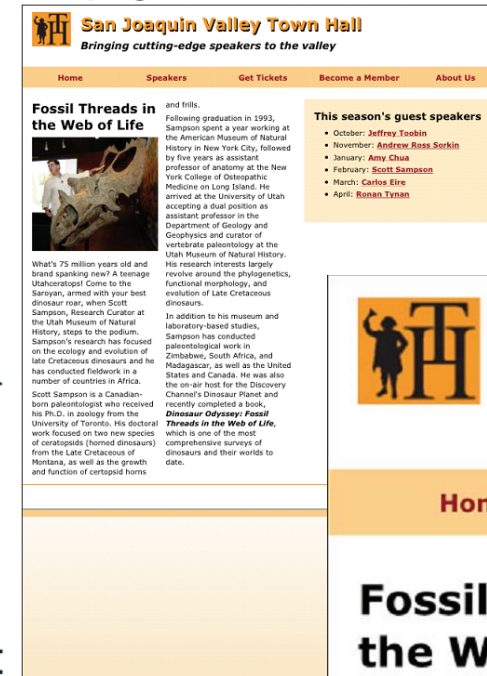
- media queries

The basic syntax of a media query

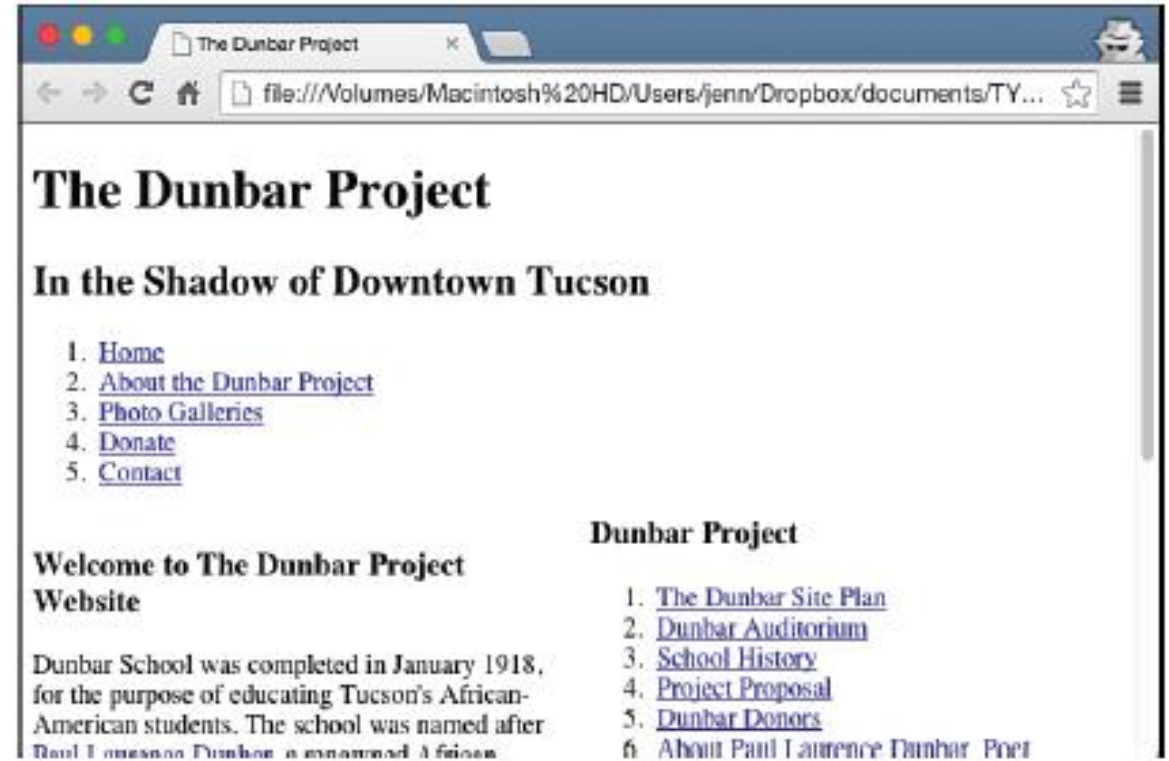
```
@media [only] media-type [and (expression-1)] [and (expression-2)]... {  
    ...styles go here  
}
```

- Example

```
@media (min-width: 320px and max-width: 1024px) { ... }
```

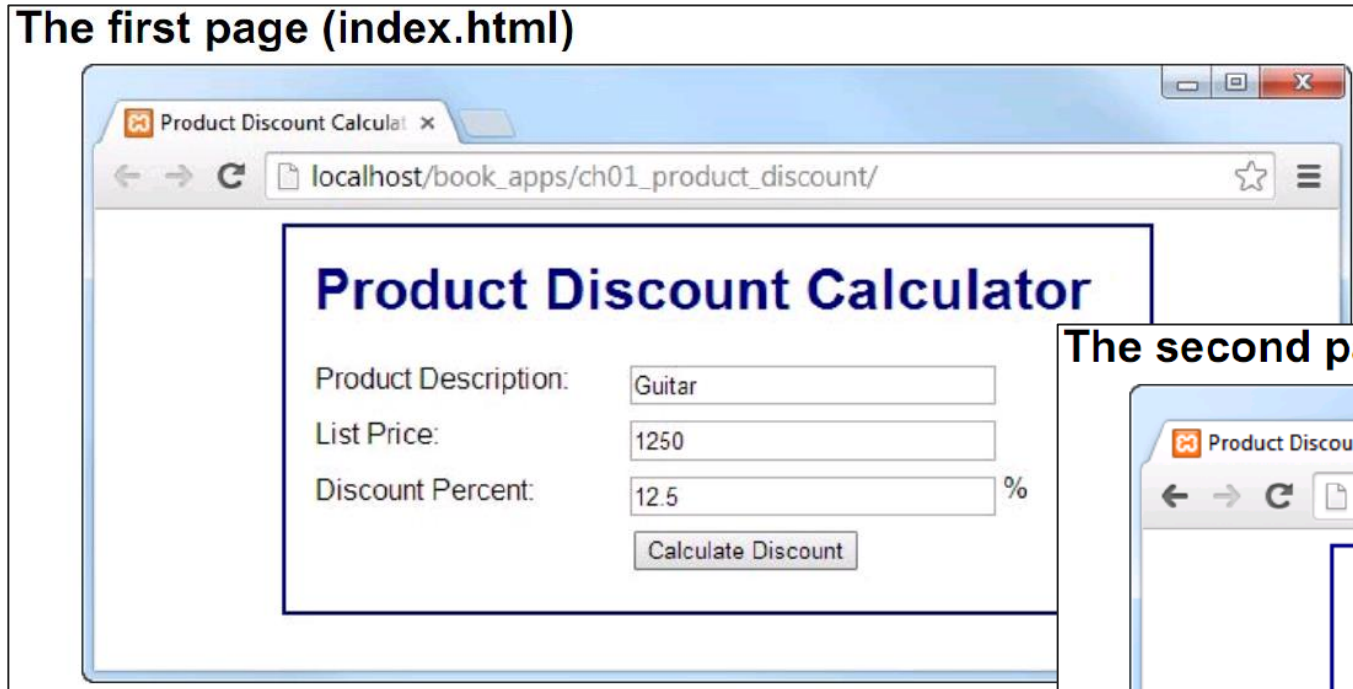


The Dunbar Project



Web Forms

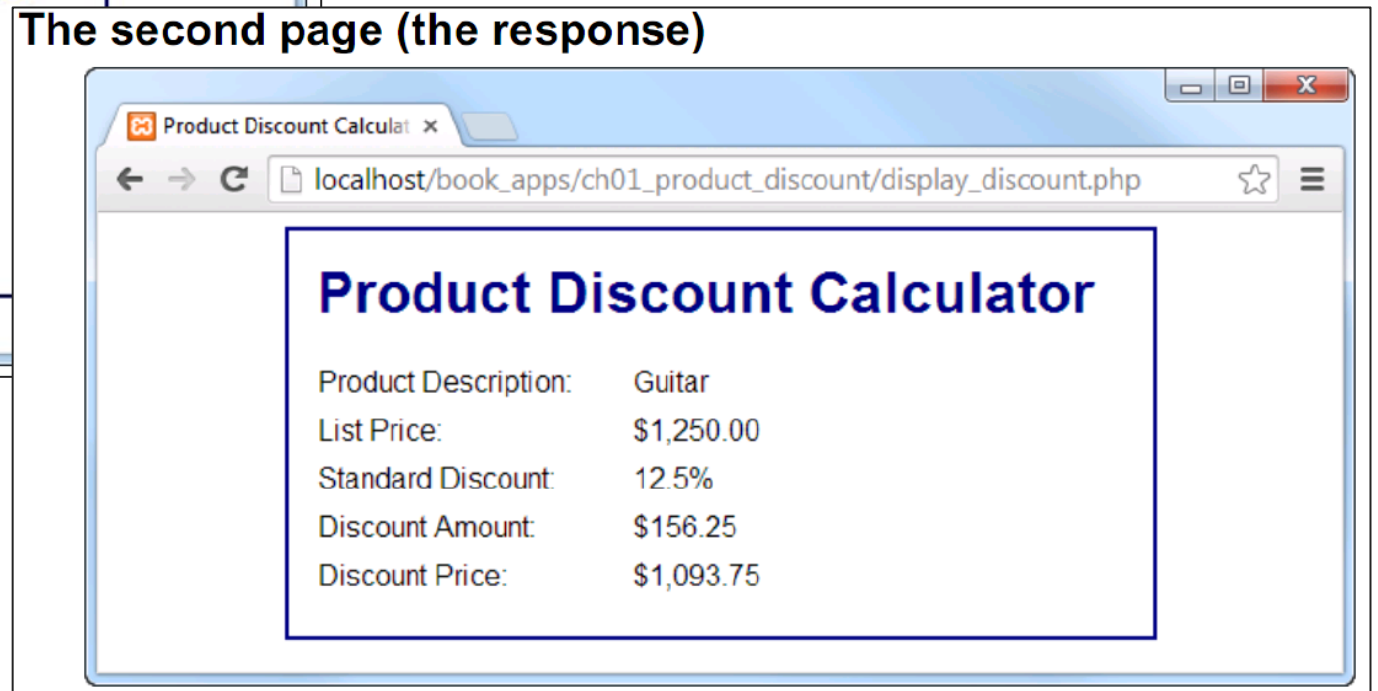
The first page (index.html)



A screenshot of a web browser window titled "Product Discount Calculator". The address bar shows "localhost/book_apps/ch01_product_discount/". The page content is enclosed in a blue-bordered box and features the title "Product Discount Calculator" in bold blue text. Below the title, there are three input fields: "Product Description:" with the value "Guitar", "List Price:" with the value "1250", and "Discount Percent:" with the value "12.5" followed by a "%" symbol. A "Calculate Discount" button is positioned below these fields.

Product Description:	<input type="text" value="Guitar"/>
List Price:	<input type="text" value="1250"/>
Discount Percent:	<input type="text" value="12.5"/> %
<input type="button" value="Calculate Discount"/>	

The second page (the response)



A screenshot of a web browser window titled "Product Discount Calculator". The address bar shows "localhost/book_apps/ch01_product_discount/display_discount.php". The page content is enclosed in a blue-bordered box and features the title "Product Discount Calculator" in bold blue text. Below the title, the calculated values are displayed in a table format.

Product Description:	Guitar
List Price:	\$1,250.00
Standard Discount:	12.5%
Discount Amount:	\$156.25
Discount Price:	\$1,093.75

Web Forms

- Creating a web form:

The HTML for a form

```
<form name="email_form" action="subscribe.php" method="post">  
  <p>Please enter your e-mail address to subscribe to our newsletter.</p>  
  <p>E-Mail: <input type="text" name="email"></p>  
  <p><input type="submit" name="submit" value="Subscribe"></p>  
</form>
```

The form in a web browser



Please enter your e-mail address to subscribe to our newsletter.

E-Mail:

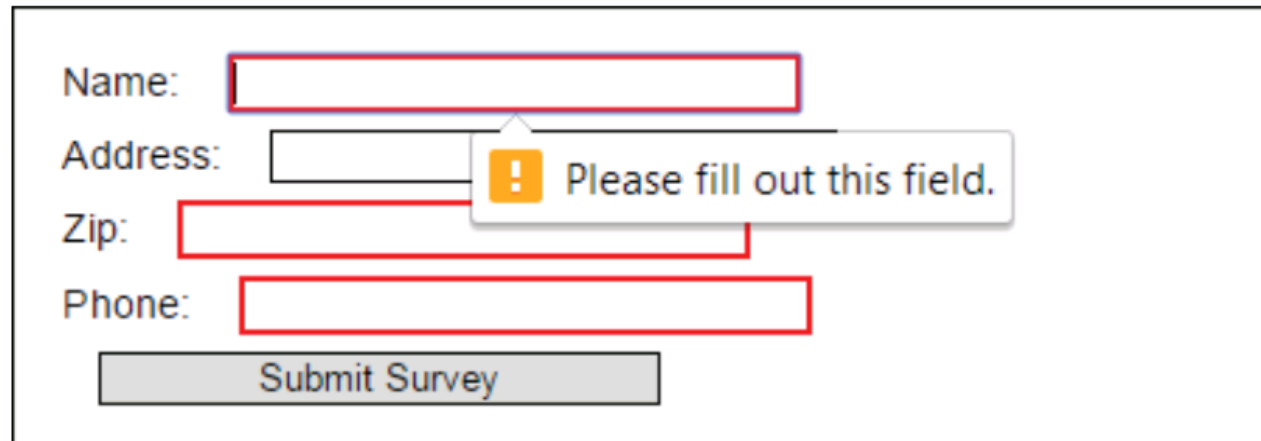
Web Forms

Form validation:

HTML that uses the validation attributes

```
Name:      <input type="text" name="name" required><br>
Address:   <input type="text" name="address" novalidate><br>
Zip:       <input type="text" name="zip" required><br>
Phone:     <input type="text" name="phone" required autocomplete="off"><br>
<input type="submit" name="submit" value="Submit Survey">
```

The error message and highlighting used by Chrome



A screenshot of a web form with four input fields: Name, Address, Zip, and Phone. The Name, Zip, and Phone fields are outlined in red, indicating they are required. The Address field is outlined in black. A yellow error message box with a red exclamation mark icon is positioned over the Address field, displaying the text "Please fill out this field." Below the input fields is a grey button labeled "Submit Survey".

Web Forms

My Guest Book

Personal Information

What is your name?

What is your e-mail address?

Survey Questions

Please check all the apply:

- ☐ I really like your Web site.
- ☐ It's one of the best sites I've ever seen.
- ☐ I sure wish my site looked as good as yours.
- ☐ I have no taste and I'm pretty dense, so your site didn't do much for me.

Please rate my site on a scale of 1(poor) to 10 (awesome):

Please choose the one thing you love best about my website:

- ☐ The amazing picture of you.
- ☐ All the cat photos, of course.
- ☐ The inspiring recap of your suburban childhood.
- ☐ The detailed list of all your Elvis memorabilia.

How can I improve my web site?

You can't. It couldn't be better. ▲
More about the cats.
More about the family.
More about Elvis. ▼

Free for All!

Feel free to send me more precise, gift offers, etc.:

Web Forms

```
forms.css
1 fieldset {
2     width: 90%;
3     border: 2px solid #ff0000;
4 }
5 #button{
6     margin-top: 12px;
7 }
8 legend {
9     font-weight:bold;
10    font-size: 125%;
11 }
12 label.question{
13     width: 225px;
14     float: left;
15     text-align: left;
16     font-weight: bold;
17 }
18 span.question{
19     font-weight: bold;
20 }
21 input, textarea, select {
22     border: 1px solid #000;
23     padding: 3px;
24 }
25 textarea{
26     height: 5em;
27     width: 22em;
28 }
```



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Thank You!

Think **Green**, Grow **Green**, Live **Green**