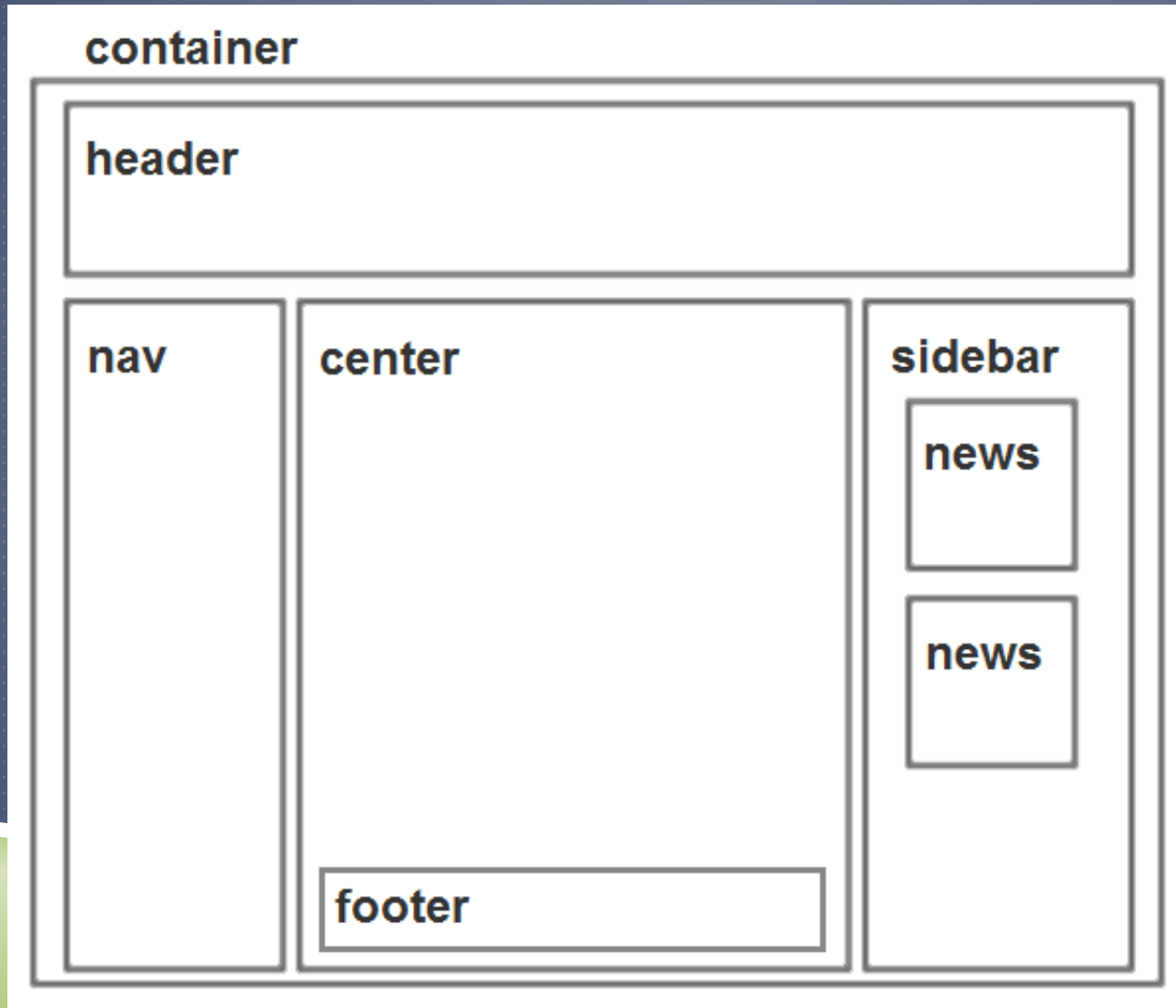


# LEARNING OUTCOMES

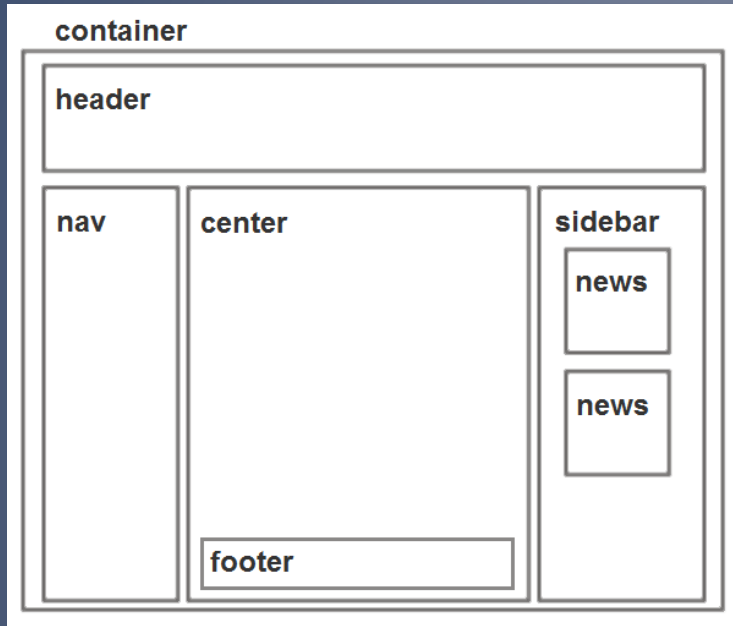
## Today, in Chapter 7, we look at...

- ▶ Configure a three-column page layout using CSS (continuing our build of LRA site)
- ▶ Configure CSS for printing
- ▶ Configure CSS for mobile display
- ▶ Utilize CSS3 media queries to target mobile devices

# THREE COLUMN PAGE LAYOUT



# THREE COLUMN LAYOUT



- ▶ container sets default background color, text color, font typeface, and a minimum width

- ▶ **Left-column navigation**

- ▶ float: left; width: 150px;

- ▶ **Right-column content**

- ▶ float: right; width: 250px;

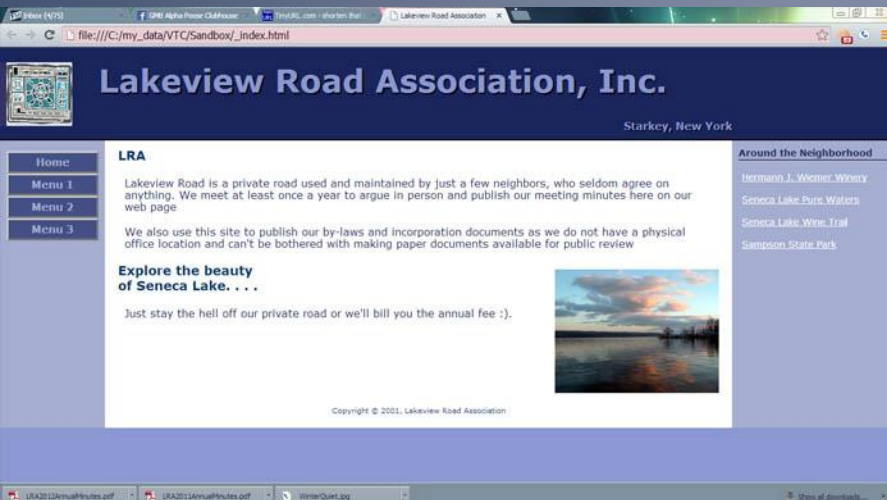
- ▶ **Center column**

- ▶ Uses the remaining screen room available room after the floating columns display

- ▶ margin: 0 260px 0 160px;

- ▶ **Footer – clears the float (from the center image)**

- ▶ clear: both;



# CSS STYLING FOR PRINT

- ▶ Create an external style sheet with the configurations for browser display.
- ▶ Create a second external style sheet with the configurations for printing.
- ▶ Connect both of the external style sheets to the web page using two `<link >` elements.

```
<link rel="stylesheet" href="wildflower.css" type="text/css" media="screen">  
<link rel="stylesheet" href="wildflowerprint.css" type="text/css" media="print">
```

# PRINT STYLING BEST PRACTICES

- ▶ **Hide non-essential content**

Example:

```
#nav { display: none; }
```

- ▶ **Configure font size and color for printing**

- ▶ Use pt font sizes, use dark text color

- ▶ **Control page breaks**

Example:

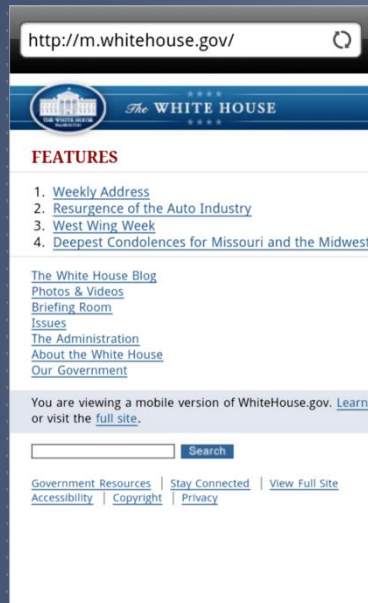
```
.newpage { page-break-before: always; }
```

- ▶ **Print URLs for hyperlinks**

Example:

```
#sidebar a:after { content: " (" attr(href) ") "; }
```

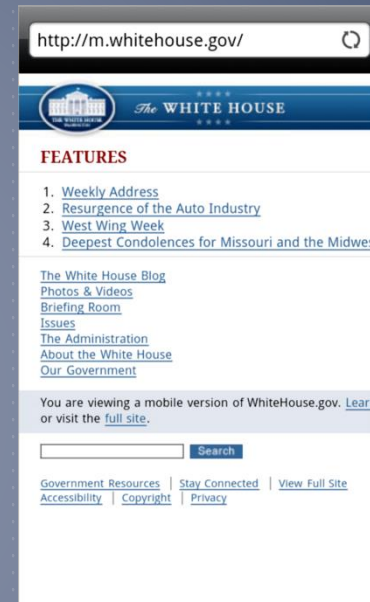
# MOBILE WEB DESIGN BEST PRACTICES



- eMarketer.com predicts 134.3 million mobile Internet users by 2013 (<http://www.emarketer.com/articles/print.aspx?1007236>)
- Three Approaches to Mobile Web:
  - Develop a new mobile site with a .mobi TLD
  - Create a separate website hosted within your current domain targeted for mobile users
  - Use CSS to configure your current website for display on both mobile and desktop devices.

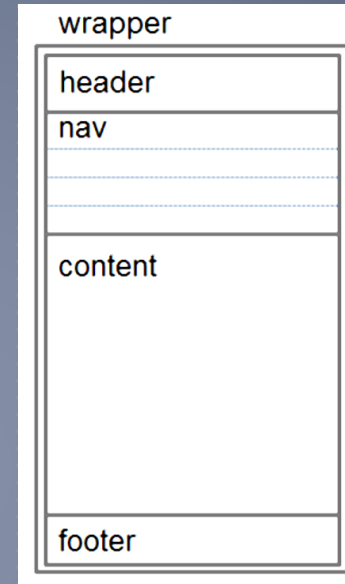
# MOBILE WEB LIMITATIONS

- ▶ Small Screen Size
- ▶ Low bandwidth
- ▶ Limited fonts
- ▶ Limited color
- ▶ Awkward controls
- ▶ Lack of Flash support
- ▶ Limited processor and memory
- ▶ Cost per kilobyte



# DESIGN TECHNIQUES FOR MOBILE WEB

- Single column design
- Avoid floats, tables, frames
- Descriptive page title
- Descriptive heading tags
- Optimize images
- Descriptive alt text for images
- Eliminate unneeded images
- Navigation in lists
- Em or percentage font size units
- Common font typefaces
- Good contrast between text and background colors
- Provide “Skip to Content” hyperlink
- Provide “Back to Top” hyperlink





# VIEWPORT META TAG

- ▶ Default action for most mobile devices is to zoom out and scale the web page
- ▶ Viewport Meta Tag
- ▶ Created as an Apple extension to configure display on mobile devices
- ▶ Configures width and initial scale of browser viewport



```
<meta name="viewport" content="width=device-width,initial-scale=1.0">
```



# CSS3 MEDIA QUERIES

## ▶ Media Query

- ▶ Determines the capability of the mobile device, such as screen resolution
- ▶ Directs the browser to styles configured specifically for those capabilities

### ▶ Example:

```
<link href="lighthousemobile.css" rel="stylesheet"
      media="only screen and (max-device-width: 480px)">
```

