LAST TIME ON IOLAB
BIG NEWS

“... a new community-driven site that aims to become a comprehensive and authoritative source for web developer documentation”

- syntax & examples
- device & platform support
- current standardization & implementation
THIS IS THE WEB
TODAY

- Media Queries
- Responsive Web Design
DEMOS

http://courses.ischool.berkeley.edu/i290-iol/f12/resources/responsive/
MEDIA QUERIES

• Consist of a media type and 0 or more expressions that check for particular “media features”

• Most common media types: “screen” and “print”

• Presentation can be tailored to a specific range of output devices without changing the content itself.
HTML4/CSS2

Inside `<head>` you can target media types:

```html
<link rel="stylesheet" type="text/css" media="screen" href="style.css">

<link rel="stylesheet" type="text/css" media="print" href="print.css">
```
OR Inside your stylesheet:

```css
@media screen {
  * {font-family: sans-serif; }
}

@media print {
  * {font-family: serif; }
}
```
Inside `<head>` you can target media types AND devices/displays/resolutions:

```html
<link rel="stylesheet" media="screen and (max-width: 600px)" href="small.css">

<link rel="stylesheet" media="screen and (min-width: 900px)" href="large.css">

<link rel="stylesheet" media="screen and (min-width: 600px) and (max-width: 900px)" href="medium.css">
```

HTML5/CSS3

OR Inside your stylesheet:

```css
@media screen and (max-width: 600px) {
    .class {background: #ccc; }
}

@media screen and (min-width: 900px) {
    .class {background: #666; }
}

@media screen and (min-width: 600px) and (max-width: 900px){
    .class {background: #333; }
}
```

MOBILE DEVICES
Examples

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

@media screen and (max-device-width: 480px) {
    .class {background: #000; }
}

<link rel="stylesheet" media="all and (orientation: portrait)" href="portrait.css">

<link rel="stylesheet" media="all and (orientation: landscape)" href="landscape.css">
```

DEMOS

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RESPONSIVE WEB DESIGN

Source: http://webdesignerwall.com/tutorials/responsive-design-in-3-steps
/* for 980px or less */
@media screen and (max-width: 980px) {
	
	#pagewrap {
	    width: 94%;
	}

	#content {
	    width: 65%;
	}

	#sidebar {
	    width: 30%;
	}

} 

These rules will be in effect if the viewport width is 980px or less

Source: http://webdesignerwall.com/tutorials/responsive-design-in-3-steps
/* for 700px or less */
@media screen and (max-width: 700px) {
  #content {
    width: auto;
    float: none;
  }
  #sidebar {
    width: auto;
    float: none;
  }
}
RESPONSIVE WEB DESIGN

/* for 480px or less */
@media screen and (max-width: 480px) {
    #header {
        height: auto;
    }
    h1 {
        font-size: 24px;
    }
    #sidebar {
        display: none;
    }
}
RESPONSIVE WEB DESIGN

Notes

Initial Scale Meta Tag (for mobile devices):

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

Flexible Images

```css
img {
    max-width: 100%;
    height: auto;
}
```
RESPONSIVE WEB DESIGN

Resources

• Test your site: http://responsinator.com

• Examples: http://mediaqueri.es

• More advanced tutorial: http://webdesignerwall.com/tutorials/responsive-design-with-css3-media-queries

• This Is Responsive: http://bradfrost.github.com/this-is-responsive/
LAB
Media Queries/Responsive Design

Add at least 3 Media Queries to your Assignment I Website
FOR NEXT TIME

Due Wed: A3 - Make your A1 simple website responsive

Data Visualization

You can find links to help with all of these on the course website at http://courses.ischool.berkeley.edu/290ta-iol/f12