IA FOR THE WEB

CSS - Part 3
Fall 2014

POSITION RECAP

Type of Positioning	Meaning of top, bottom, left right	Element Stays in Document Flow	Notes
static	None	Yes	
relative	How much to move the element from where it would be statically positioned	Yes	Think of this as an adjustment
fixed	Where to position the element with respect to the browser window	No	Does not move when the page moves
absolute	Where to position the element with respect to the most recent non-static ancestor	No	

Z-INDEX EXAMPLE

- Higher z-index appears closer to viewer

- View example

CENTERING

- If you want to center text within a block element, use `text-align: center`.

- To center a block element, give the element a width and then set the margins to automatic.

- View example

RESPONSIVE DESIGN

- Responsive designs are designs that adapt to different device sizes, resolutions, and orientations

- Examples at http://mediaqueri.es/

- Responsive designs use the `@media` directive in CSS to query for device information

MEDIA QUERIES

- Allows you to write rules that apply to specific media situations, such as screen size, orientation, available colors, etc.

- View an example

- Properties for queries

TRANSFORMATIONS

- Scale, translate, rotate items

- In 2D or 3D

- View examples

ANIMATIONS

- Certain CSS properties are animatable

- Create keyframes using `@keyframes` directive

- From the item you want to animate, use `animation-name`, `animation-duration`, and `animation-iteration-count`

- View examples

- Use animate.css for pre-made animations

PREPROCESSING

- CSS Preprocessors, such as <u>LESS</u> and <u>SASS</u> allow you to write CSS-like code that compiles to CSS

- This code can have variables, functions, and horizontal inheritance (mixins)

LESS: VARIABLES

- Declare it like so: `@iu-crimson: #7D110C`

- Access it using the variable name: `background-color: @iu-crimson`

LESS: NESTING

LESS	Compiles to

``
header{
  background-color: red;
  h1{
     color: white;
  }
}
``
	``
	header{
	   background-color: red;
	}
	
	header h1{
	  color: white;
	}
	``

LESS: MIXINS

LESS	Compiles to
```.borders{ border: 1px solid #000; box-shadow: 2px 2px #000; border-radius: 3px; } article{ background-color: red; .borders; }```	```article{ background-color: red; border: 1px solid #000; box-shadow: 2px 2px #000; border-radius: 3px; }```

LESS: PARAMETRIC MIXINS

LESS	Compiles to

``.borders(@color){
  border: 1px solid @color;
  box-shadow: 2px 2px @color;
  border-radius: 3px;
}
 	
article{
  background-color: red;
  .borders(#FFF);
}```
	``article{
	  background-color: red;
	  border: 1px solid #FFF;
	  box-shadow: 2px 2px #FFF;
	  border-radius: 3px;
	}```

LESS: BUILT-IN FUNCTIONS

LESS	Compiles to
| ```
@crimson: #7D110C;
article{
   background-color: @crimson;
   .borders(#FFF);
}
``` | ```
article{
   background-color: red;
   border: 1px solid #FFF;
   box-shadow: 2px 2px #FFF;
   border-radius: 3px;
}
``` |

BOOTSTRAP

- An HTML and CSS framework for creating responsive designs

- getbootstrap.com