A R T V 330–001: Interaction Design for Visual Communication I / NKU / Professor Julie Mader-Meersman

Vocuabulary Sheet / CSS3 Possibilities / Transitions & Transforms

NEW POSSIBILITIES

css3 is an evolution of the css specification from the W3. Technically, it is still in progress, which is why some browsers do not support it. Most current and recent versions of browsers do support it, and future browsers certainly will; support in older browsers is almost nonexistent. Prior to css3 techniques, complex animation software (actionscript) and/or javascript had to be used to achieve the same outcomes. Now, it's as easy as using and building upon standard css knowledge and methods. This is benefitial because download times on devices is shorter and fewer scripting languages are required to achieve the same/similar effects.

CSS3 SYNTAX

One of the most distinctive characteristics of css3 syntax compared to 'regular' css syntax is that there is often a need to direct the CSS rule toward specific groupings of browsers through a prefix system. For example, a grouping of CSS properties is needed to ensure that a CSS3 rule appears as consistently as possible across browsers, and it looks like this:

```
.example {
```

}

```
-webkit-border-radius: 8px; (Safari, Chrome)
-moz-border-radius: 8px; (Firefox)
-o-border-radius: 8px; (Opera)
border-radius: 8px; (include one without a browser prefix, too)
```

The code above would apply rounded corners with a small radius of 8 pixels to a div. Notice that the code is repeated 4 times and is the same except for the browser-directed prefixes. The last rule in the list should be the standard rule without a prefix. As the web moves forward, the prefixes will be able to be dropped. To ensure consistency for now, prefix use is recommended.

SOME COMMON, BASIC CSS3 TECHNIQUES

Rounded Corners (border-radius property) Multiple Columns (column-count, column-gap, and column-rule properties) Opacity (opacity property) Text Shadows (text-shadow property)



Dan Cederholm's Things We Left on the Moon CSSZ test site

INTERMEDIATE CSS3 TECHNIQUES

TRANSITIONS These allow for animated state changes over specified durations of time. As their name suggests, they are generally used to soften changes applied to elements.

```
transition declaration
```

```
property
duration timingfunction
.example {
  -webkit-transition: background 0.3s ease;
  -moz-transition: background 0.3s ease;
  -o-transition: background 0.3s ease;
  transition: background 0.3s ease;
}
```

TRANSFORMS These allow for changes to elements such as scale, rotation, and skewing; they can be 2D and/or 3D. Transitions and transforms can be used in combination to achieve things such as sophisticated navigation and interactive charts, but infinite possibilities exist. Combination example:

```
#Transform_example img {
    margin-top: .5em;
    max-width: 100%;
    height: auto;
    -webkit-transition: all .3s linear;
}
#Transform_example img:hover {
    -webkit-transform: rotate(-3deg);
}
```

ADVANCED CSS3 TECHNIQUES

ANIMATION (*supported in webkit browsers only*) In-depth combinations of transitions and transforms can be used to achieve motion design features and animated illustrations in web sites and html apps. Refer to links on the css page of our site for live examples. **Keyframes** are another relatively simple way to incorporate effective animation (compared to learning a new language like javascript).