CSS M5-6 Notes

CSS vendor prefixes or CSS browser prefixes are a way for browser makers to add support for new CSS features during periods of testing and experimentation. Browser prefixes are used to add new features that may not be part of the final and formal CSS specification.
For example, the prefix for Safari and Chrome is -webkit. The border-radius property is currently supported in Chrome, Safari, and Mozilla, as long as it is accompanied by the browser prefix.
To specify the border-radius in Chrome and Safari, the following syntax is used:
-webkit-border-radius: 24px;
With CSS3, you can give any element "rounded corners" by using the border-radius property.
The CSS:
border-radius: 20px;
background-color: green;A rectangle can be turned into a circle using only CSS.
To create a circle, the border radius should be half of the height and the width.
The rectangle in the example below has a width and height of 200px. By setting the border radius to 100px, the corners will be rounded to form a circle:

```
div {
  width: 200px;
  height: 200px;
  border-radius: 100px;
  background-color: green;
  color: white;
color: white;
```

The CSS3 box-shadow property applies shadow to elements.
Components of the box-shadow property are decoded by browsers in the following manner:
- The first length for the horizontal offset will cast the shadow to the right of the box (required)
- The second length is for the vertical offset that will cast the shadow to below the box (required)
- The color of the shadow (optional)

In the example below, the horizontal and vertical offsets have been set to 10px:

```
div {
  width: 300px;
  height: 100px;
```

```
  background-color: #9ACD32;
  box-shadow: 10px 10px #888888;
}
```

The "inset" keyword allows to draw an inner shadow in the box. To show an inset shadow, just add the inset keyword:

```
box-shadow: inset 10px 10px 5px #888888;
```

You can define as many shadows for the same box as you want by writing all of them comma-separated in the same rule.

In the example below, two inner shadows have been created by separating each shadow with a comma.

```
box-shadow:
inset 10px 10px 5px #888888,
inset -10px -10px 5px #888888;
```

Before CSS3, transparent background images were used to create transparency effects. The new features of CSS3 now make it easier to create transparency effects.

CSS supports color names, hexadecimal, and RGB colors.
In addition, CSS3 introduces the following:

RGBA Colors

RGBA color values are an extension of RGB color values with an alpha channel, which specifies the opacity for a color.

An RGBA color value is specified with: rgba(red, green, blue, alpha). The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (fully opaque).

HSL (Hue, Saturation, Lightness) Colors

An HSL color value is specified with: hsl(hue, saturation, lightness).

Hue is a degree on the color wheel ranging from 0 to 360

0 (or 360) is red, 120 is green, 240 is blue.

Saturation is a percentage value: 100% is the full color.

Lightness is also a percentage; 0% is dark (black) and 100% is white. HSLA color values are an extension of HSL color values with an alpha channel - which specifies the opacity for a color (just like RGBA).

In the example below, a transparent glass menu bar is created with CSS3.

In the HTML file, a <nav> tag containing an <ul> list with links has been added:

```
<nav>
  <ul>
```

```
      <li><a href="#">COURSES</a></li>
      <li><a href="#">DISCUSS</a></li>
      <li><a href="#">TOP LEARNERS</a></li>
      <li><a href="#">BLOG</a></li>
  </ul>
</nav>
```

A number of CSS3 features are used to create the effects:

```
body {
  background:url("bg.jpg");
}
nav {
  padding: 50px 0;
  min-width: 500px;
}
nav ul {
  background: linear-gradient(90deg,
    rgba(255, 255, 255, 0) 0%,
    rgba(255, 255, 255, 0.2) 25%,
    rgba(255, 255, 255, 0.2) 75%,
    rgba(255, 255, 255, 0) 100%);
  box-shadow: 0 0 25px rgba(0, 0, 0, 0.1),
    inset 0 0 1px rgba(255, 255, 255, 0.6);
}
nav ul li {
  display: inline-block;
}
nav ul li a {
  padding: 10px;
  color: #FFFFFF;
  font-size: 18px;
  font-family: Arial;
  text-decoration: none;
  display: block;
 }
```