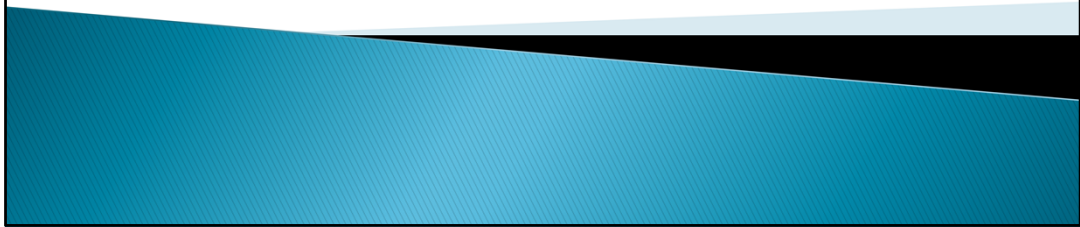


Progressive Enhancement Using CSS 3

By Dr Derek Peacock



New Features

- ▶ Borders – rounded corners
- ▶ Backgrounds – multiple images
- ▶ Colour – Opacity and gradients
- ▶ Text – Shadows & Web Fonts
- ▶ Box – Shadows
- ▶ Transformations & Transitions
- ▶ Media Queries – size and aspect ratios

The above list are the main features that can be used to enhance the appearance of a web page, yet if the browser does not support the feature it will still display a usable web page. The enhancements just make the page appear more 3 dimensional. Transformations and Transitions can be used to provide simple animations with the minimal of code. This greatly reduces the need to add flash effects. Media Queries goes hand in hand with responsive desing to provide web pages that make the best use of mobile phone, tablet and desktop screens.

HTML5 Browser Compatibility

your browser scores

463


AND 13 BONUS POINTS

out of a total of 500 points

You are using Chrome 29 on Windows 7 Correct? ✓ X

10.6K 16k 6.4k
Tweet Like +1

The HTML5 test score is an indication of how well your browser supports the upcoming HTML5 standard and related specifications. Even though the specification isn't finalized yet, all major browser manufacturers are making sure their browser is ready for the future. Find out which parts of HTML5 are already supported by your browser today and compare the results with other browsers.



<http://html5test.com/>

Not all browsers provide full support for HTML5 and CC3, Chrome scores highest. Html5Test.com can check how compatible a browser is.

HTML5 Forms Support

Forms		110/115
Field types		
▶ input type=text	Yes	✓
▶ input type=search	Yes	✓
▶ input type=tel	Yes	✓
▶ input type=url	Yes	✓
▶ input type=email	Yes	✓
▶ input type=datetime	No	✗
▶ input type=date	Yes	✓
▶ input type=month	Yes	✓
▶ input type=week	Yes	✓
▶ input type=time	Yes	✓
▶ input type=datetime-local	Yes	✓
▶ input type=number	Yes	✓
▶ input type=range	Yes	✓
▶ input type=color	Yes	✓
▶ input type=checkbox	Yes	✓
▶ input type=image	Yes	✓
▶ input type=file	Yes	✓
▶ textarea	Yes	✓
▶ select	Yes	✓
▶ fieldset	Yes	✓
▶ datalist	Yes	✓
▶ keygen	Yes	✓
▶ output	Yes	✓
▶ progress	Yes	✓
▶ meter	Yes	✓

This page also lists the features that are supported in detail. These are just some of them.

CSS3 Browser Compatibility

<http://caniuse.com/>

The screenshot shows the Can I Use website interface. At the top, it says "Can I use..." with navigation links for "Suggestions", "Feed", and "Twitter". A search bar contains the text "border-radius, WebGL, woff, etc". Below the search bar, there are three main columns: "CSS", "HTML5", and "SVG". Each column contains a list of browser features with checkboxes indicating support. The "CSS" column lists features like @font-face, calc(), and 3D Transforms. The "HTML5" column lists features like Audio element, Canvas, and HTML5 form features. The "SVG" column lists features like Inline SVG in HTML5 and SVG filters. There is also an "Other" section at the bottom right of the main content area.

To check for CSS3 support caniuse.com lists all the browser features supported by your chosen browser.

CSS3 Feature Support

border-radius

IE	Firefox	Chrome	Safari	Opera	iOS Safari	Opera Mini	Android Browser	Blackberry Browser	IE Mobile
							2.1		
							2.2		
					3.2		2.3		
					4.0-4.1		3.0		
8.0					4.2-4.3		4.0		
9.0	22.0	28.0	5.1		5.0-5.1		4.1	7.0	
10.0	23.0	29.0	6.0	16.0	6.0-6.1	5.0-7.0	4.2	10.0	10.0
11.0	24.0	30.0	7.0	17.0	7.0				
	25.0	31.0							

If one feature is selected then the web site lists all the browsers that support it.

Forms Example 2

```
<form id="ExampleForm" name="ExampleForm" method="post">
  <h2>Create Your Account</h2>
  <fieldset>
    <h3>Personal Details</h3>
    <ul>
      <li>
        <label for="FullNameTextBox">Full Name:</label>
        <input id="FullNameTextBox" type="text"
          required maxlength="10" />
        <span title="Required Field">*</span>
      </li>
      <li>
        <label for="EmailTextBox">Email Address:</label>
        <input id="EmailTextBox" type="email"
          placeholder="somenone@provider.com" />
      </li>
    </ul>
  </fieldset>
</form>
```

This is another example of a way of structuring a form using in this case an un-ordered list to separate the fields in a fieldset. This however causes a validation breach as there is no legend. All fieldsets should have a legend. In this case a heading has been used instead.

Forms Styling 2

```
form
{
  background-color:#fff;
  border: thin solid #000000;
  border-radius:5px;
  margin:10px;
  padding:5px;
  width:400px;
}

fieldset
{
  background-color:#e1e1e1;
  padding: 5px 10px 10px 10px;
  margin-bottom:12px;
  border: none;
  border-radius:5px;
}

fieldset ul
{
  list-style:none;
  background-color:#fff;
  border: 1px solid #eaeaea;
}

fieldset ul li
{
  margin: 0.5em 0;
}
```

The difference in styling is the styling fieldset ul, and fieldset ul li. And the introduction of border radius which needs setting in the form and the fieldset as they define overlapping areas.

Rounded Corners

```
border-radius: 0px 0px 20px 20px;  
border-radius: 20px;
```

Create Your Account

Personal Details

Full Name: *

Email Address:

Web Site Url:

Date Uploaded:

Year First Enrolled:

At the moment the effect is subtle, but will be enhanced later by adding box shadow.

Box Shadow

```
border-radius: 8px;  
-webkit-box-shadow: ■ rgba(0, 0, 0, .5) 4px 4px 4px;  
box-shadow: ■ rgba(0, 0, 0, .5) 4px 4px 4px;
```

Create Your Account

Personal Details

Full Name: *

Email Address:

Web Site Url:

Date Uploaded: ▼

Year First Enrolled: ▼

Submit

Cancel

Visual Studio validates CCS3 and HTML5 and will prompt you if vendor specific styles need adding for browser compatibility. The resulting affect is to add a 3D appearance which will not be present if the browser does not support these CCS3 styles.

Gradient Fills

```
fieldset h3
{
  background: #1e5799; /* Old browsers */
  background: -moz-linear-gradient(top, #1e5799 0%, #2989d8 50%);
  background: -webkit-gradient(linear, left top, left bottom, color-stop(0%, #1e5799), color-stop(50%, #2989d8));
  background: -webkit-linear-gradient(top, #1e5799 0%, #2989d8 50%);
  background: -o-linear-gradient(top, #1e5799 0%, #2989d8 50%);
  background: -ms-linear-gradient(top, #1e5799 0%, #2989d8 50%);
  background: linear-gradient(to bottom, #1e5799 0%, #2989d8 50%);
  filter: progid:DXImageTransform.Microsoft.gradient( startColor=#1e5799, endColor=#2989d8);
  padding: 10px;
  color: white;
}
```

Gradient Generators


<http://www.colorzilla.com/gradient-editor/>

Ultimate CSS Gradient Generator


A powerful Photoshop-like CSS gradient editor from [ColorZilla](#).

For Firefox For Chrome Gradient Generat

Presets



Name: Green 3D




Stops

Opacity: <input type="text"/>	Location: <input type="text"/> %	<input type="button" value="delete"/>
Color: <input type="text"/>	Location: <input type="text"/> %	<input type="button" value="delete"/>

Adjustments

Preview



Orientation: Size: x IE

CSS

```
background: #b4e391; /* Old browsers */
background: -ms-linear-gradient(top, #b4e391 0%, #61c419 50%, #b4e391 100%); /* FF3.6+ */
background: -webkit-gradient(linear, left top, left bottom, color-stop(0%, #b4e391), color-stop(50%, #61c419), color-stop(100%, #b4e391)); /* Chrome, Safari4+ */
background: -webkit-linear-gradient(top, #b4e391 0%, #61c419 50%, #b4e391 100%); /* Chrome10+, Safari5.1+ */
background: -o-linear-gradient(top, #b4e391 0%, #61c419 50%, #b4e391 100%); /* Opera 11.10+ */
background: -ms-linear-gradient(top, #b4e391 0%, #61c419 50%, #b4e391 100%); /* IE10+ */
background: linear-gradient(to, #b4e391 0%, #61c419 50%, #b4e391 100%); /* W3C */
filter: progid:DXImageTransform.Microsoft.gradient(startColorstr='#b4e391', endColorstr='#b4e391', gradientType=0); /* IE6-9 */
```

Color format: Comments IE9 Support (?)

Using Gradient Fills

Create Your Account

Personal Details

Full Name: *

Email Address:

Web Site Url:

Date Uploaded: ▼

Year First Enrolled: ▼

Gradient Fills – Another Example



Gradient fills can typically be used in the header region, and rounded corners can be used to create menu entries that look like tabs.

Text Shadow

```
header h1
{
  text-shadow: 2px 2px rgba(0, 0, 0, 0.5);
}
```



Text Shadows can be used to give text a 3D like appearance, to make the shadow more subtle a transparent black is used so that background images or colours can show through.

Internet Explorer 8



The same web site in IE8 looks very plain in comparison, but is still fully functional and can be used.