Decorative borders and shadows

In the previous sub-section, we looked at decorative backgrounds and images. We will continue this theme by examining decorative borders and shadows. Like background-colors, once we start using borders we will be directly facing the underpinnings of HTML. Where does a span inside a paragraph begin and end? How far does it extend? Before we start using the decorative CSS these aren't questions of any great concern. But now they are. We'll see how the various techniques for managing this in the next sub-section.

For now, let's look at these new properties: `border-style`, `border-color`, `border-width`, border abbreviations, `border-radius` and `text-shadow`.

BORDER-STYLE

```
p { border-style: solid; }
```

This property sets the style of a border. Possible values include `none`, `hidden`, `solid`, `dotted`, `dashed`, `double`, `groove`, `ridge`, `inset`, and `outset`. Here the visible border styles displayed on a gray border.

solid	dotted	dashed	double	groove	ridge	inset	outset

Note that the `groove`, `ridge`, `inset` and `outset` borders all use black in addition to any explicit `border-color`. So if the `border-color` is also black they won't be effective. Also `double`, `groove` and `ridge` are usually not satisfactory on thin borders. They'll require a fat `border-width`.

 The difference between `none` and `hidden` has to do with the sizing and positioning of the element. An item with a `hidden` border is positioned as if it had a border, but the border is not drawn. Whereas with `border-style` of `none`, no space is allocated for the border at all.

BORDER-COLOR

Sets the color of the border.

BORDER-WIDTH

Sets the width of the border. Supports a variety of units (px, em, rem).

BORDER ABBREVIATIONS

All border styles just introduced are actually abbreviations that can be broken out if needed. For example, here we set four different styles for a border.

```
p {
    border-left-style: solid;
    border-right-style: dotted;
    border-bottom-style: dashed;
    border-left-style: hidden;
  }
```

This same can be done with border-width and border-color. (border-left-color, border-top-width, etc)

Or, going in the other direction, the CSS property border can help abbreviate even further. Use the formula `border: <width><style> <color>;` separating the values with spaces.

```
p { border: 1px solid gray; }
```

BORDER-RADIUS

Sometimes it seems that the whole of the World Wide Web consists of round cornered rectangles. Join the fun by using the border-radius property.

CSS	Result
```.rrect { border-width: 4px; border-style: double; border-radius: 20px; /* round corners */ padding: 15px; text-align: center; }```	Silence is Golden

Note this is fun to use with a background color or background image and no border at all:

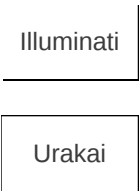| CSS	Result
```.rrectbg { border-style: none; /* no border at all */ background-color: beige; border-radius: 20px; padding: 15px; text-align: center; }```	Silence is Golden

BOX-SHADOW

a shadow effect can be applied to the outlining rectangle of an element with the box-shadow CSS property. The `box-shadow` is typically controlled with four values separated by spaces.

```
box-shadow: <x-offset> <y-offset> <blur> <color>;
```

The offset values are dimension units (px, em, etc) can be positive or negative. Positive x values place the shadow to the right, and negative values place the shadow to the left. Similarly positive y values place the shadow vertically lower than the element and negative values move it up.

The blur value is also a dimension unit, but can only be 0 or positive.

CSS	Result

`.illuminati { box-shadow: 1px 1px 2px black; }`
 	
`.urakai { box-shadow: 0px 0px 6px black; }`
 	
`p {`
`    text-align: center;`
`    padding: 10px; /* make the box a little bigger */`
`}`
	Illuminati
	
	Urakai

TEXT-SHADOW

This CSS property takes the same values as box-shadow, but the shadow is applied directly to the text shapes.

```
text-shadow:  <x-offset> <y-offset> <blur> <color>;
```

CSS	Result
`.majestic-12 { text-shadow: 1px 1px 3px black; }`	Majestic-12