Module-5 CSS – Part III.

Module-5 content.

- CSS3 Text Effects
- CSS3 Fonts
- CSS3 2D Transforms
- CSS3 3D Transforms
- CSS3 Transitions
- CSS3 Animations
- CSS3 Sprite Animations
- CSS3 Multiple Columns
- CSS3 User Interface

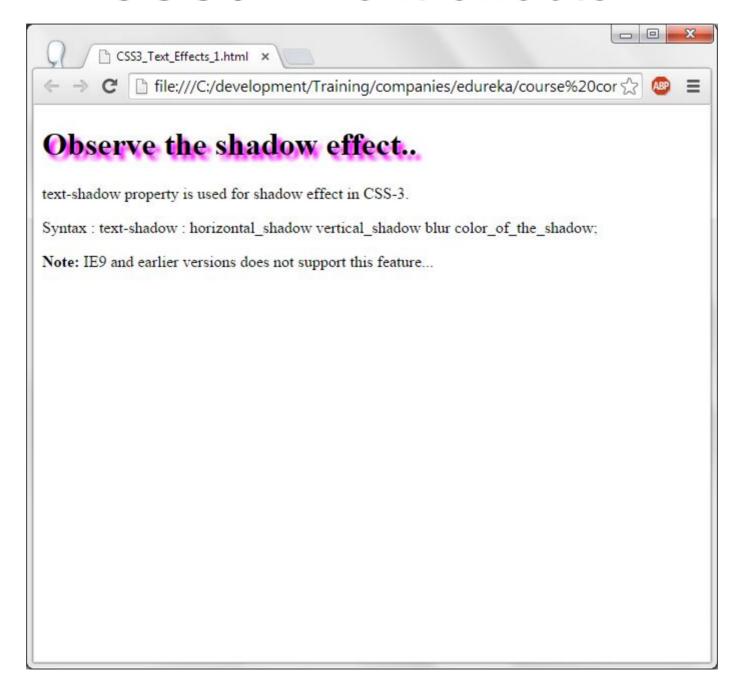
CSS3 – Text effects.

- CSS3 has the following text effects:
 - Text-shadow Gives the text shadow effect.
 - Word wrap Wraps the word.

CSS3 – Text effects.

```
<!DOCTYPE html>
<html>
<head>
<style>
h1 {
  text-shadow: 5px 5px 5px #FF00FF;
</style>
</head>
<body>
<h1>Observe the shadow effect..</h1>
 text-shadow property is used for shadow effect in CSS-3. 
Syntax : text-shadow : horizontal_shadow vertical_shadow
                                                            blur color_of_the_shadow;
<b>Note:</b> IE9 and earlier versions does not support this feature... 
</body>
</html>
```

CSS3 – Text effects.



CSS3 – Text effects- text shadow.

 Text-shadow property is used for giving the text-shadow effect in css-3.

Syntax is :text-shadow : horizontal_shadow vertical_shadow blur color_of_the_shadow;

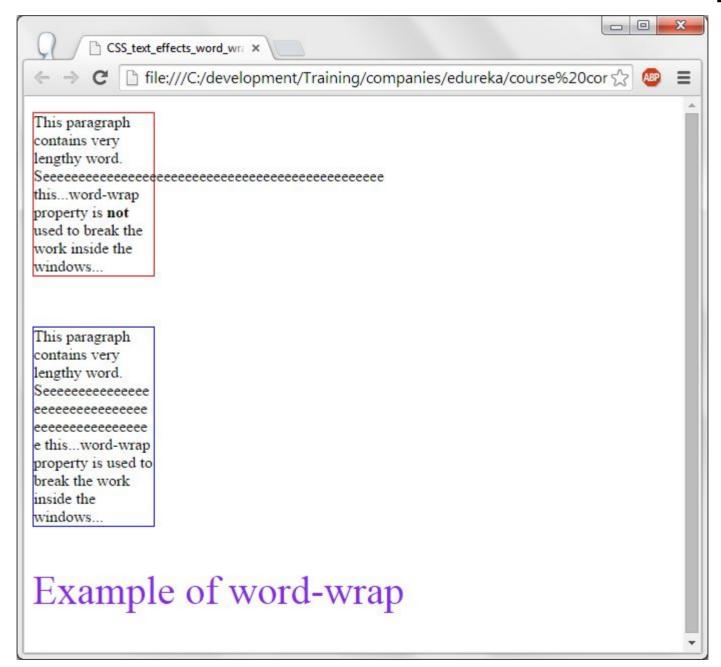
 Horizontal shadow is how much of horizontal shadow to be displayed in pixels. The same with vertical shadow. How much of blur has to be there and color of the shadow also can be specified.

CSS3 – Text effects – Word wrap

```
<!DOCTYPE html>
<html>
<head>
<style>
p.no_wordwrap {
  width: 120px;
  border: 1px solid #ff0000;
p.word_wrap {
  width: 120px;
  border: 1px solid #0000FF;
  word-wrap: break-word;
p.info
 font-size:40px;
 color: #8A2BE2;
 text-decoration:bold;
```

```
</style>
</head>
<body>
This paragraph contains very lengthy word.
<b>not</b> used to break the work inside the windows...
<br/>br/>
This paragraph contains very lengthy word.
to break the work inside the windows...
 Example of word-wrap 
</body>
</html>
```

CSS-text effects – word wrap.



css3-word-wrap

- In the first box, no word wrap is used.
- In the second box, word-wrap property is used and the lengthy word is wrapped inside the box.
- For both the paragraphs, width of the paragraph is set to 120 pixels.

CSS3 – Fonts.

- Font-face is used to display the text in the which is not installed in the system.
- A font file has to be downloaded and this font style can be applied to the text.
- Font styles
 - True type fonts (TTF file) This is the standard font which is developed apple and microsoft.
 - Open type Font (OTF file) This type has advanced features for fonts and it is developed by Adobe and Microsoft.
 - Web Open Font Format (WOFF file) This is either TTF file or OTF file with additional meta data. This is w3c recommendation.

```
<!DOCTYPE html>
                           CSS3 - Fonts.
<html>
<head>
<style>
@font-face {
 font-family: myFirstFont;
 src: url(Felipa-Regular.otf);
div.font_file,h1 {
 font-size:40px;
 font-family: myFirstFont;
 color: #9400D3;
div.regular
 font-size:20px;
 font-family:sans serif;
h1
text-align:center;
 font-size:90px;
 color:#9400D3;
```

</style>

CSS3 – Fonts.

```
</head>
<body>
<h1> New Font </h1>
</div class="font_file">
I am writing it in caligraphy.
For this @font-face property of css-3 is used. In this block, name of the font family is mentioned and the font file is also given... This is Felipa-Regular font file. Which is downloaded from internet. </div>
<br/>
<br/>
<div class="regular">
```

I have changed the font style to regular...

</div>

</body>

CSS3 – Fonts.



New Font

I am writing it in caligraphy. For this @font-face property of css-3 is used. In this block, name of the font family is mentioned and the font file is also given... This is Felipa-Regular font file. Which is downloaded from internet.

I have changed the font style to regular...

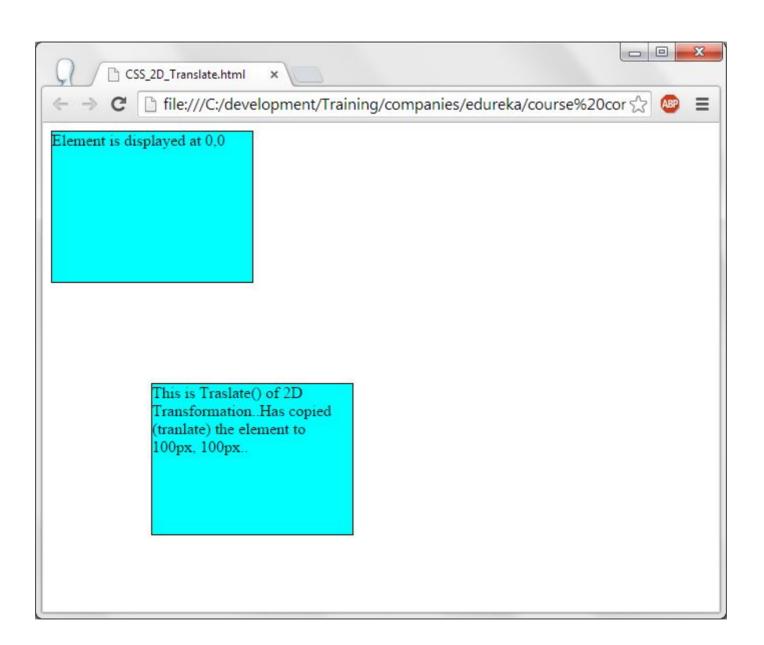
CSS3 - Font

- Open Type Font (OTF) file is downloaded from net and stored in a directory. In this code, Felipa-Regular.otf is downloaded.
- Using font-face, name of the font is defined and font file is loaded by using src:url (font file).
- This font name can be used for the HTML elements to apply the font style.

CSS3 – 2D Transformation.

- With 2D tansformation HTML elements can be stretched, spinned, moved, Scaled etc.,
- Some of the methods of 2D transformation are:
 - Scale() Increases or decreases the size of the elements.
 - Translate() Moves the current elemen to another position.
 - Rotate() Rotates the element by taking a degree.
 - Skew() Turns the element by a given degree.
 - Matrix() Can combine all the 2D methods.

```
<!DOCTYPE html>
<html>
<head>
                           CSS3 – 2D Transformation
<style>
div {
  width: 200px;
  height: 150px;
  background-color: #00FFFF;
  border: 1px solid black;
div#div2 {
  -webkit-transform: translate(100px,100px);
</style>
</head>
<body>
<div>Element is displayed at 0,0</div>
<div id="div2">This is Traslate() of 2D Transformation..Has copied (tranlate) the element to 100px
100px..</div>
</body>
</html>
```



CSS3 – 2D Transformation – Tranlate()

- A DIV element is specified with width, height, background color and border.
- With translate of 2D Transformation, this element is copied to another location.

```
<html><head><style>
body{
   background-color: #92E978;
                                             CSS3 - 2D
img{
                               Transformation - Rotate
  width: 200px;
  height: 200px;
  background-color: #D9E6CF;
  border: 1px solid black;
img#id1 {
     position:absolute;
     left: 600px;
     top: 100px;
  -webkit-transform: rotate(30deg); --> Rotates the element with the given degree. Here the
element is image.
img#id2 {
     position:absolute;
     left: 300px;
     top: 100px;
  -webkit-transform: rotate(30deg); --> Rotates the element with the given degree. Here the
element is image.
```

```
img#id3 {
     position:absolute;
     left: 800px;
      top: 300px;
  -webkit-transform: rotate(30deg);
img#id4 {
      position:absolute;
     left: 250px;
      top: 400px;
  -webkit-transform: rotate(30deg);
img#id5 {
      position:absolute;
     left: 550px;
      top: 400px;
  -webkit-transform: rotate(30deg);
img.id{
position:absolute;
top:225px;
left: 26px;
```

```
h1{ position:absolute; top:300px; left: 480px; color: blue; text-align:center;}
</style></head><body>
<h1> FRIFNDS </h1>
<a class="id1" href="http://hdwallpapercorner.com/5246/childhood-friends"><img</pre>
id="id1" src="CSS3 2D-Transform t1.1.png"></a>
<a class="id2"</pre>
href="http://www.chatelaine.com/health/how-your-childhood-friends-influence-your-happiness/"><
img id="id2" src="CSS3 2D-Transform t1.2.png"></a>
<a class="id3"</pre>
href="http://www.dreamstime.com/stock-image-teen-friends-image10971091">
<img id="id3" src="CSS3 2D-Transform t1.3.png"></a>
<a class="id4" href="http://connect.makerhood.com/2011/07/24/picnic-in-the-park/">
<img id="id4" src="CSS3 2D-Transform t1.4.png"></a>
<a class="id5"</pre>
href="http://journalistsresource.org/studies/society/social-media/social-selection-peer-influence-o
nline-social-network">
<img id="id5" src="CSS3 2D-Transform t1.5.png"></a>
</body>
</html>
```



CSS2D-Transformation – scale.

- Scale() method of 2D transformation will scale the element up/down.
- Sytax of scale() is
 - -webkit-transform: scale(x,y);
 - Webkit-transform is used for chrome, safari and opera browsers.
 - Scales the element to the x (horizontally) and y (vertically) position appropriately. If scale (2,2) is used the width and height is scaled twice as the original element / image.

```
<html><head><style>
body{
   background-color: #92E978;
img.id{
visibility: hidden;
img#id1{
    position: absolute;
     left: 400px;
    top: 100px;
    -webkit-transform: scale(1,1);
img#id2 {
    position: absolute;
    left: 400px;
    top: 300px;
  -webkit-transform: scale(2,2);
img#id3 {
   position: absolute;
    left: 400px;
     top: 550px;
  -webkit-transform: scale(3,3);
```

```
h1{text-align: center;}
</style></head><body>
<h1> FRIFNDS </h1>
<a class="id"
href="https://endoraballweber.wordpress.com/2014/04/08/5-reas
ons-why-my-childhood-friends-are-awesome/"><img class="id"
src="CSS3_2D-Transform t1.png"></a>
<a class="id"
href="https://endoraballweber.wordpress.com/2014/04/08/5-reas
ons-why-my-childhood-friends-are-awesome/"><img id="id1"
src="CSS3 2D-Transform t1.png"></a>
<a class="id"
href="https://endoraballweber.wordpress.com/2014/04/08/5-reas
ons-why-my-childhood-friends-are-awesome/"><imq id="id2"
src="CSS3_2D-Transform_t1.png"></a>
<a class="id"</p>
href="https://endoraballweber.wordpress.com/2014/04/08/5-reas
ons-why-my-childhood-friends-are-awesome/"><img id="id3"
src="CSS3 2D-Transform t1.png"></a>
```

</body></html>



CSS-3- 2D tranformation — Skew.

- Using skew, the element can be rotated by horizontal and vertical axis. Rotate() is only one angle but skew is 2 dimensional (x and y).
- Sytax of skew is:
 - -webkit-transform: skew(20deg,30deg);
 - This will skew the image/element by 20 degrees horizontally (x-axis) and 30 degrees vertically (y-axis).

```
<html><head><style>
body{
   background-color: #92E978;
img{
  width: 200px;
  height: 200px;
  background-color: #D9E6CF;
  border: 1px solid black;
img#id1 {
     position:absolute;
     left: 650px;
     top: 200px;
   -webkit-transform: skew(20deg,30deg);
img#id2 {
      position:absolute;
     left: 800px;
     top: 100px;
  -webkit-transform: skew(10deg,50deg);
```

```
img#id3 {
     position:absolute;
     left: 200px;
      top: 200px;
  -webkit-transform: skew(-40deg,10deg);
img#id4 {
      position:absolute;
     left: 10px;
      top: 50px;
 -webkit-transform: skew(-50deg,10deg);
img.id{
position:absolute;
top:300px;
left: 430px;
h1{
  color: blue;
  text-align:center;
</style></head><body>
<h1> FRIENDS </h1>
```

```
<a class="id"
href="https://endoraballweber.wordpress.com/2014/04/08/5-reasons-why-my-childhood-f
riends-are-awesome/"><img id="id2" src="CSS3 2D-Transform t1.png"></a>
<a class="id1"</pre>
href="http://hdwallpapercorner.com/5246/childhood-friends"><imq id="id1"
src="CSS3 2D-Transform t1.1.png"></a>
<a class="id2"</pre>
href="http://www.chatelaine.com/health/how-your-childhood-friends-influence-your-happi
ness/"><img class="id" src="CSS3 2D-Transform t1.2.png"></a>
<a class="id3"</pre>
href="http://www.dreamstime.com/stock-image-teen-friends-image10971091">
<img id="id3" src="CSS3 2D-Transform t1.3.png"></a>
<a class="id4"</pre>
href="http://connect.makerhood.com/2011/07/24/picnic-in-the-park/">
<img id="id4" src="CSS3 2D-Transform t1.4.png"></a>
</body>
</html>
```

CSS-3- 2D tranformation — Skew.



CSS3 – 3D Tranformation.

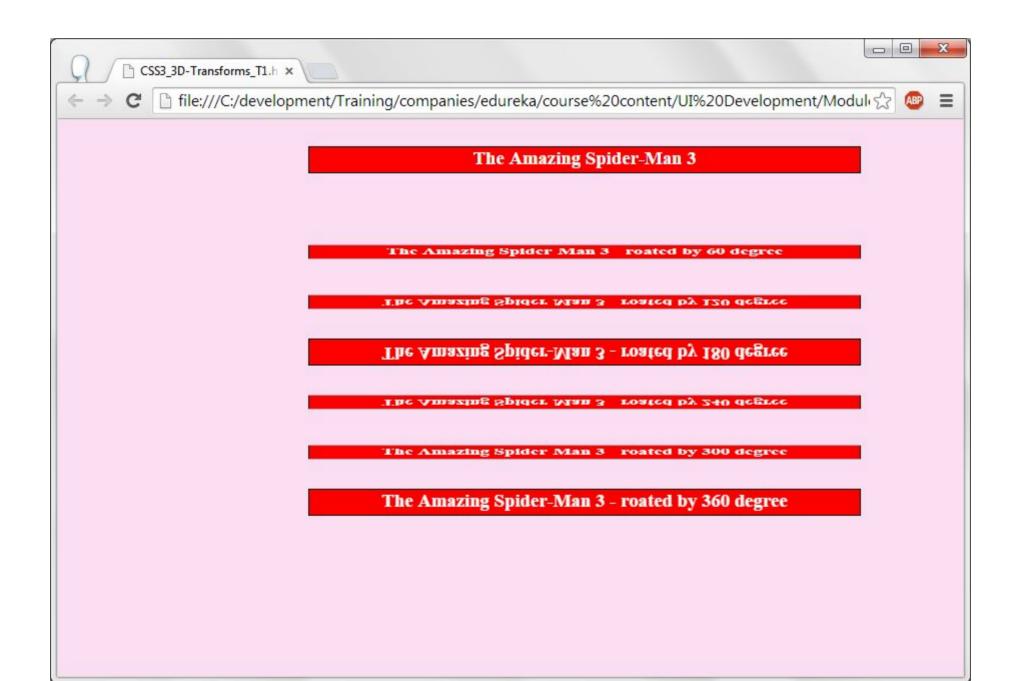
- In CSS3 3 dimension of the image/elements can be transformed.
- RotateX() and rotateY() methods are used to rotate x and y axis of the image / element in 3 dimension.
- Rotatex() and rotateY() takes the degree as the argument and rotates the element / image.

```
<html><head><style>
         background-color: #FCDEF2;}
body{
h1{ color: black; text-align: center; }
h3 {
  position: absolute;
  left:250px;
  width: 550px;
  text-align:center;
  height: 25px;
  border: 1px solid black;
  background-color: red;
  color: white;
h3#start {
   position: absolute;
   top: 100px;
   left:250px;
   -webkit-transform: rotateX(60deg);
```

CSS3 – 3D Tranformation – x axis.

```
h3#start1 { position: absolute: top: 150px; left:250px;
  -webkit-transform: rotateX(120deg);}
h3#start2 { position: absolute; top: 200px;
  left:250px; -webkit-transform: rotateX(180deg);
                                                        CSS3 - 3D
h3#start3 { position: absolute; top:250px;
  left:250px; -webkit-transform: rotateX(240deg);
                                                     Tranformation
                                                           - x axis
h3#start4 { position: absolute; top: 300px;
  left:250px; -webkit-transform: rotateX(300deg);
h3#start5 { position: absolute; top: 350px;
  left:250px; -webkit-transform: rotateX(360deg);
</style></head><body>
<h3>The Amazing Spider-Man 3</h3>
<h3 id="start">The Amazing Spider-Man 3 - roated by 60 degree</h3>
<h3 id="start1">The Amazing Spider-Man 3 - roated by 120 degree </h3>
<h3 id="start2">The Amazing Spider-Man 3 - roated by 180 degree </h3>
<h3 id="start3">The Amazing Spider-Man 3 - roated by 240 degree </h3>
<h3 id="start4">The Amazing Spider-Man 3 - roated by 300 degree </h3>
<h3 id="start5">The Amazing Spider-Man 3 - roated by 360 degree </h3>
</html>
```

CSS3 – 3D Tranformation – x axis.



```
<html>
<head>
<style>
h1{
                                     CSS3 - 3D
text-align: center;
                                Tranformation –
a.id2{
   position:absolute;
                                         Y axis.
   top: 430px;
   left: 440px;
img {
  top: 90px;
  position: absolute;
  left:20px;
  width: 200px;
  height: 300px;
img#a1 {
  top: 90px;
  position: absolute;
  left:200px;
  -webkit-transform: rotateY(30deg); --> Rotates the image 30
degree in y axis.
```

```
<html>
<head>
<style>
h1{
                                     CSS3 - 3D
text-align: center;
                                Tranformation –
a.id2{
   position:absolute;
                                         Y axis.
   top: 430px;
   left: 440px;
img {
  top: 90px;
  position: absolute;
  left:20px;
  width: 200px;
  height: 300px;
img#a1 {
  top: 90px;
  position: absolute;
  left:200px;
  -webkit-transform: rotateY(30deg); --> Rotates the image 30
degree in y axis.
```

```
img#a2 {
  top: 90px;
   position: absolute;
  left:350px;
  -webkit-transform: rotateY(60deg);
img#a4 {
  top: 90px;
  position: absolute;
  left:450px;
  -webkit-transform: rotateY(120deg);
img#a5 {
  top: 90px;
  position: absolute;
  left:600px;
  -webkit-transform: rotateY(150deg);
img#a6 {
  top: 90px;
   position: absolute;
  left:780px;
  -webkit-transform: rotateY(180deg);
</style></head><body>
```

```
<h1> Kool Kart!!! </h1>
<figure>
<img src="CSS3_3D-Transforms_T1.2.png"
title="Chiffon Saree">
<fig-caption> original picture </fig-caption>
```

</figure>

CSS3 – 3D Tranformation – Y axis.

```
<img id="a1" src="CSS3_3D-Transforms_T1.2.png" title="Chiffon"</pre>
Saree">
<img id="a2" src="CSS3 3D-Transforms T1.2.png" title="Chiffon"</pre>
Saree">
<img id="a3" src="CSS3_3D-Transforms_T1.2.png" title="Chiffon"</pre>
Saree">
<img id="a4" src="CSS3_3D-Transforms_T1.2.png" title="Chiffon"
Saree">
<img id="a5" src="CSS3 3D-Transforms T1.2.png" title="Chiffon"</pre>
Saree">
<img id="a6" src="CSS3_3D-Transforms_T1.2.png" title="Chiffon"
Saree">
<img id="a7" src="CSS3 3D-Transforms T1.2.png" title="Chiffon"
Saree">
<b><a class="id2"
href="http://www.myntra.com/printed-sari/triveni/triveni-pink--yellow
-chiffon-printed-saree/445547/buy?src=search&uq=&q=saree&p=1
4">Chiffon Printed Saree</a></b>
</html>
```

CSS3 – 3D Transformation.

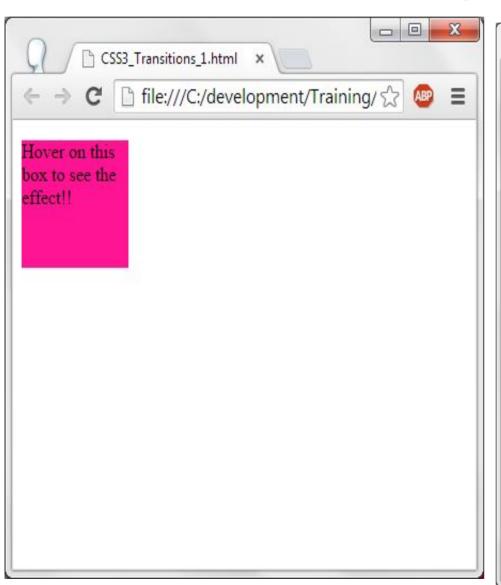


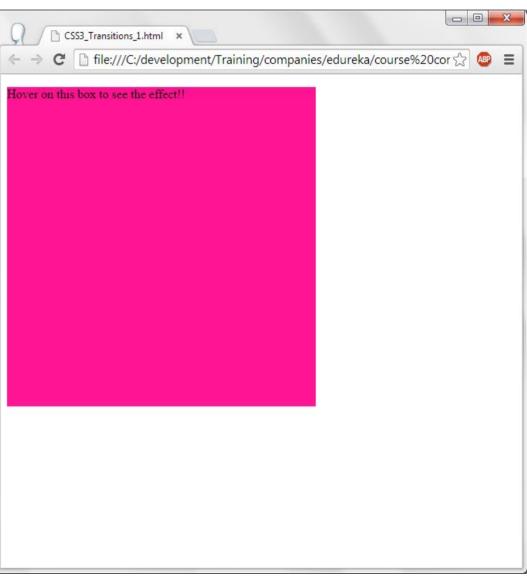
CSS3 – Transition.

- Style can be changed in CSS3 without using Java Script or flash.
- -webkit-transition: width 2s, height 2s, -webkit-transform 2s; is used to have the transition.
 - For transitioning, for width it taks 2 seconds, for height it takes 2 seconds and to show the effect of transformation will take 2 seconds.
- -webkit-transform: rotate(360deg);
 - Rotates the elements by 360 degree. Any degree can be given. If the degree is 720 then it take 360degress x 2. Complete rotation will take place twice. If the given degree is 3600 then the element will be rotated 10 times.

```
<!DOCTYPE html>
<html>
<head>
<style>
                                 CSS3 – Transition.
div {
   width: 100px;
  height: 100px;
  background: DeepPink;
  -webkit-transition: width 2s, height 2s, -webkit-transform
5s;
div:hover {
  width: 400px;
  height: 400px;
  -webkit-transform: rotate(3600deg); /* Chrome, Safari,
Opera */
</style>
</head>
<body>
<div>Hover on this box to see the effect!!</div>
</body>
```

CSS3 – Transition.





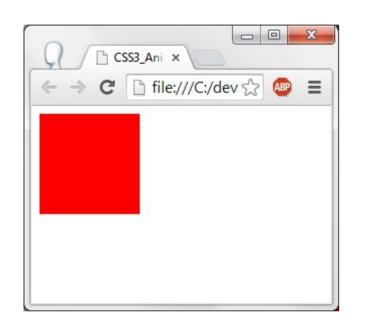
CSS3 – animation.

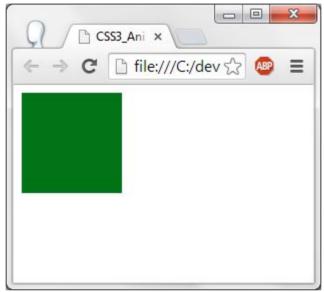
- With CSS3 animation properties, it is possible to replace flash and java script animations...
- -webkit-animation: name 5s; --> Animation is defined under name and it displays in 5 seconds.
- @-webkit-keyframes name { --> This is definition of the how the colors has to change and.
- 0% {background: red;} --> Initially red color is displayed.
- 25% {background: green;} --> After 25% of the animation, color changes to green and so on.
- 50% {background: blue;}
- 100% {background: yellow;}
- •

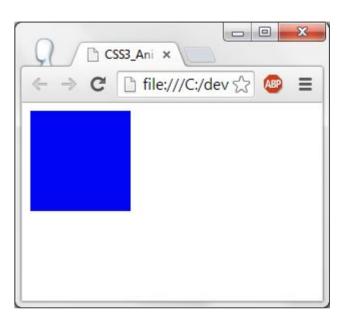
```
<!DOCTYPE html>
<html>
<head>
<style>
                                  CSS3 – animation.
div {
  width: 100px;
  height: 100px;
  background: red;
  -webkit-animation: myfirst 5s; /* Chrome, Safari, Opera
/* Chrome, Safari, Opera */
@-webkit-keyframes myfirst {
  0% {background: red;}
  25% {background: green;}
  50% {background: blue;}
  100% {background: yellow;}
</style>
</head>
<body>
<div></div>
</body>
```

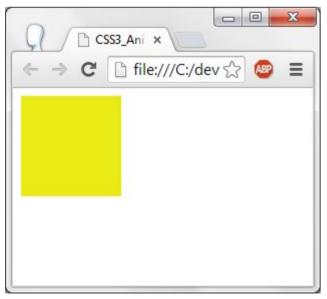
</html>

CSS3 – animation.

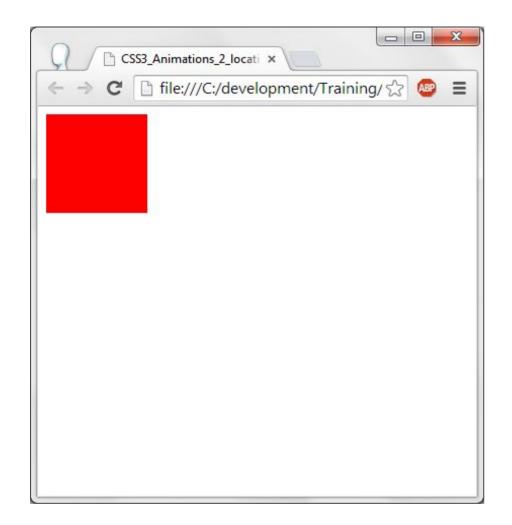


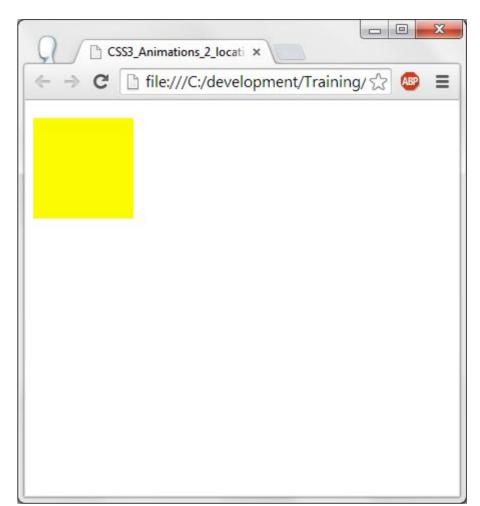






```
<!DOCTYPF html>
<html>
                     CSS3 – Animation.
<head>
<style>
div {
  width: 100px;
  height: 100px;
  background: red;
    position:relative;
  -webkit-animation: myfirst 5s; /* Chrome, Safari, Opera */
/* Chrome, Safari, Opera */ From the previous exmple, location
where the element should be displayed is given.
@-webkit-keyframes myfirst {
  0% {background: red;left:0px; top:0px;} --> Displays at 0,0
  25% {background: green;left:500px; top:0px;} --> displays at 500,0 --> So the box moves
from 0,0 to 500,0 as animation and so on.
  50% {background: blue; left: 500px; top: 500px;}
    75% {background: brown; left:0px; top:500px;}
  100% {background: yellow;left:0px; top:0px;}
</style>
</head>
<body>
<div></div>
</body></html>
```





Sprite animation

- Sprite animation is also another type of animation.
- Create n number of frames of animation in a sheet (Sprite sheet) in an image (jpg / png) file.
- Use the steps() function to display the number of frames and the duration of the display. This is will display as sprite animation.

- In CSS3, multiple columns can be displayed as in news paper.
- Following properties can be used for multiple columns.
 - Column-count: Number of columns to displays.
 - Column-gap: How much of gap should be given between column to column.
 - Column-rule: How much is the thickness of the column gap line, style of the line as dotted, dashed etc., and in which color should the line be displayed (The column seperator).

```
<html>
<head>
<style>
h1{
  color: #4350B2;
  text-align:center;
h1 {
  text-shadow: 5px 5px 5px #A9DCF2;
p{
 -webkit-column-count: 3; --> There are 3 columns to be displayed.
 -webkit-column-gap: 20px; --> Gap between column to column is 20 pixels.
 text-align: justify;
</style>
</head>
<body>
<h1>CSS (Cascading Style Sheets)</h1>
```

p>Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to change the style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.



CSS (Cascading Style Sheets)

Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to change the style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate css file,

and reduce complexity and repetition in the structural content, such as semantically insignificant tables that were widely used to format pages before consistent CSS rendering was available in all major browsers. CSS makes it possible to separate presentation instructions from the HTML content in a separate file or style section of the HTML file. For each matching HTML element, it provides a list of formatting instructions. For example, a CSS rule might specify that "all heading 1 elements should be bold," leaving pure semantic HTML markup that asserts "this text is a level 1 heading" without formatting code such as a tag indicating how such text should be displayed. This separation of formatting and content makes it possible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. It can also be used to

display the web page differently depending on the screen size or device on which it is being viewed. While the author of a web page typically links to a CSS file within the markup file, readers can specify a different style sheet, such as a CSS file stored on their own computer, to override the one the author has specified. If the author or the reader did not link the document to a style sheet, the default style of the browser will be applied. The CSS specification describes a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities or weights are calculated and assigned to rules, so that the results are predictable. The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/css is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

CSS3 – Multiple Columns with image display.

```
<html><head><style>
h1{ color: #4350B2; text-align:center;}
     text-shadow: 5px 5px 5px #A9DCF2;}
p{
 -webkit-column-count: 4:
 -webkit-column-gap: 20px;
 text-align: justify;
        display: block;
                         float: right;
                                      width: 100%;
img {
</style></head><body>
<h1>Are we conscious?</h1>
How does the brain perceive things? And how does it make connections between the
perception and the actual data processing? Read on to find out, says Michael S A Graziano.
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Of the three most fundamental scientific questions about the human condition, two have been answered. First, what is our relationship to the rest of the Universe? Copernicus answered that one. We're not at the centre. We're a speck in a large place.

CSS3 – Multiple Columns with image display.







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Are we conscious?

How does the brain perceive things? And how does it make connections between the perception and the actual data processing? Read on to find out, says Michael S A Graziano. Of the three most fundamental scientific questions about the human condition, two have been answered. First, what is our relationship to the rest of the Universe? Copernicus answered that one. We're not at the centre. We're a speck in a large place.



Second, what is our relationship to the diversity of life? Darwin answered that one. Biologically speaking, we're not a special act of creation. We're a twig on the tree of evolution. Third, what is the relationship between our minds and the physical world? Here, we don't have a settled answer. We know something about the body and brain, but what about the subjective life inside? Consider that a computer, if hooked up to a camera, can process information about the wavelength of light and determine that grass is green. But we humans also experience the

we process. What is this mysterious aspect of ourselves? Science of perceiving Many theories have been proposed, but none has passed scientific muster. I believe a major change in our perspective on consciousness may be necessary. a shift from a credulous and egocentric viewpoint to a skeptical and slightly disconcerting one: namely, that we don't actually have inner feelings in the way most of us think we do. Imagine a group of scholars in the early 17th century, debating the process that purifies white light and rids it of all colours. They'll never arrive at a scientific answer. Why? Because despite appearances, white is not pure. It's a mixture of colours of the visible spectrum, as Newton later discovered. The scholars are working with a faulty assumption that comes courtesy of the brain's visual system. The scientific truth about white differs from how the brain reconstructs it. The brain builds models about items in the world, and those models are often not accurate. From that realisation, a new perspective on consciousness has emerged in the work of philosophers like Patricia S Churchland and Daniel C Dennett. Here's my way of putting it: How does the brain go beyond processing information to become subjectively aware of information? The answer is: It doesn't. The brain has arrived at an incorrect conclusion. When we introspect and seem to find that ghostly thing awareness, consciousness, the way green looks or pain feels - our cognitive machinery is accessing internal models, and those models are providing

seeming property. And there is no way for the brain to determine through introspection that the story is wrong because introspection always accesses the same incorrect information. You might object that this is a paradox. If awareness is an erroneous impression, isn't it still an impression? And isn't an impression a form of awareness? But the argument here is that there is no subjective impression; there is only information in a data-processing device. When we look at a red apple, the brain computes information about colour. It also computes information about the self and about a physically incoherent property of subjective experience. The brain's cognitive machinery accesses that interlinked information and derives several conclusions: There is a self, a me: there is a red thing nearby; there is such a thing as subjective experience; and I have an experience of that red thing. Cognition is captive to those internal models. Such a brain would inescapably conclude it has subjective experience. I concede that this approach is counterintuitive. One reason is that it seems to leave a gap in the logic: Why would the brain waste energy computing information about subjective awareness and attributing that property to itself if the brain doesn't, in fact, have this property? This is where my own work comes in. In my lab at Princeton. my colleagues and I have been developing the "attention schema" theory of consciousness, which may explain why that computation is useful and would evolve in any complex brain.

Wavelength is a real, physical phenomenon; colour is the brain's approximate, slightly incorrect model of it. In the attention schema theory, attention is the physical phenomenon, and awareness is the brain's approximate, slightly incorrect model of it. In neuroscience, attention is a process of enhancing some signals at the expense of others; attention is a way of focusing resources. Attention: a real, mechanistic phenomenon that can be programmed into a computer chip. Awareness: a cartoonish reconstruction of attention that is as physically inaccurate as the brain's internal model of colour. In this theory, awareness is not an illusion: awareness is a caricature. Something - attention - really does exist, and awareness is a distorted accounting of it. One reason that the brain needs an approximate model of attention is that to be able to control something efficiently, a system needs at least a rough model of the thing to be controlled. Another reason is that to predict the behaviour of other creatures, the brain needs to model their brain states, including their attention. This theory pulls together evidence from social neuroscience, attention research, control theory and elsewhere Almost all other theories of consciousness are rooted in our intuitions about awareness. Like the intuition that white light is pure, our intuitions about awareness come from information computed deep in the brain. But the brain computes models that are caricatures of real things. And as with colour, so with consciousness: It's best to be skeptical of

CSS3 – Multiple Columns with column rule.

```
<html>
<head>
<style>
h1{
  color: #4350B2:
  text-align:center;
h1 {
  text-shadow: 5px 5px 5px #A9DCF2;
p{
 -webkit-column-count: 3;
 -webkit-column-gap: 20px;
  -webkit-column-rule: 4px solid #ff00ff; --> Display the column gap as a line with a
width of 4 pixels and in pink color.
 text-align: justify;
img {
   display: block;
   float: left:
      width: 100%;
```

}</style></head><body>

CSS3 - Multiple Columns with column rule.



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How does the brain perceive things? And how does it make connections between the perception and the actual data processing? Read on to find out, says Michael S A Graziano. Of the three most fundamental scientific questions about the human condition, two have been answered. First, what is our relationship to the rest of the Universe? Copernicus answered that one. We're not at the centre. We're a speck in a large place. Second, what is our relationship to the diversity of life? Darwin answered that one. Biologically speaking, we're not a special act of creation. We're a twig on the tree of evolution. Third, what is the relationship between our minds and the physical world? Here, we don't have a settled answer. We know something about the body and brain, but what about the subjective life inside? Consider that a computer, if hooked up to a camera, can process information about the wavelength of light and determine that grass is green. But we humans also experience the greenness. We have an awareness of information we process What is this mysterious aspect

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Are we conscious?

change in our perspective on consciousness may be necessary, a shift from a credulous and egocentric viewpoint to a skeptical and slightly disconcerting one: namely, that we don't actually have inner feelings in the way most of us think we do. Imagine a group of scholars in the early 17th century, debating the process that purifies white light and rids it of all colours. They'll never arrive at a scientific answer. Why? Because despite appearances, white is not pure. It's a mixture of colours of the visible spectrum, as Newton later discovered. The scholars are working with a faulty assumption that comes courtesy of the brain's visual system. The scientific truth about white differs from how the brain reconstructs it. The brain builds models about items in the world, and those models are often not accurate. From that realisation, a new perspective on consciousness has emerged in the work of philosophers like Patricia S Churchland and Daniel C Dennett. Here's my way of putting it: How does the brain go beyond processing information to become subjectively aware of information? The answer is: It doesn't. The brain has arrived at an incorrect conclusion. When we introspect and seem to find that ghostly thing - awareness, consciousness, the way green looks or pain feels - our cognitive machinery is accessing internal models, and those models are providing information that is wrong. The machinery is computing an elaborate story about a magicalseeming property. And there is no way for the brain to determine through introspection that the story is wrong because introspection always accesses the same incorrect information. You might object that this is a paradox. If awareness is an erroneous impression. isn't it still an impression? And isn't an impression a form of awareness? But the argument here is that there is no subjective impression; there is only information in a data-processing device. When we look at a red apple, the brain computes information about colour. It also computes information about the self and about a physically incoherent property of subjective experience. The have an experience of that red thing. Cognition is captive to those internal models. Such a brain would inescapably conclude it has subjective experience. I concede that this approach is counterintuitive. One reason is that it seems to leave a gap in the logic: Why would the brain waste energy computing information about subjective awareness and attributing that property to itself if the brain doesn't, in fact, have this property? This is where my own work comes in. In my lab at Princeton, my colleagues and I have been developing the "attention schema" theory of consciousness, which may explain why that computation is useful and would evolve in any complex brain. Theory of the brain Here's the gist of it: Take again the case of colour and wavelength. Wavelength is a real, physical phenomenon; colour is the brain's approximate, slightly incorrect model of it. In the attention schema theory, attention is the physical phenomenon, and awareness is the brain's approximate, slightly incorrect model of it. In neuroscience, attention is a process of enhancing some signals at the expense of others; attention is a way of focusing resources. Attention: a real, mechanistic phenomenon that can be programmed into a computer chip. Awareness: a cartoonish reconstruction of attention that is as physically inaccurate as the brain's internal model of colour. In this theory, awareness is not an illusion; awareness is a caricature. Something - attention - really does exist, and awareness is a distorted accounting of it. One reason that the brain needs an approximate model of attention is that to be able to control something efficiently, a system needs at least a rough model of the thing to be controlled. Another reason is that to predict the behaviour of other creatures, the brain needs to model their brain states, including their attention. This theory pulls together evidence from social neuroscience, attention research, control theory and elsewhere. Almost all other theories of consciousness are rooted in our intuitions about awareness. Like the intuition that white light is pure, our intuitions about awareness

CSS3 – New UI.

- In CSS3, resizing elements have been introduced.
- It is done through resize property.
- Resize: both --> Specifies resizing can be done in both horizontal and vertical directions.
- Overflow: auto --> If the text overflows in the given area then horizontal / vertical scroll bars are added automatically.

```
<html>
<head>
<style>
                CSS3 – New UI resize.
p{
  border: 2px solid;
  padding: 10px 40px;
  width: 710px;
  resize: both:
  overflow: auto;
h1 { text-align:left; color:red;}
</style></head>
<body>
<b> CONTRACT LETTER </b></br>
The Western Sydney Football Club is pleased to offer you a contract of employment with us as
our Recruting Scout. The position is to commence from 1 December 2014 and will cease on 31st
December 2017.</br>
Salary Offered is $100,000 per year with an increase per year of 5% until end of contract.</br>
We look forward to you becoming a part of the club.</br>
Yours Sincerely,</br>
George</br>
</body>
```

</html>

CSS3 - New UI resize.



Thank you!