CSS3 Transitions

• CSS3, allows us to add an effect when changing from one style to another, without using Flash animations, JavaScripts or JQuery.

- Transitions are effects that let an element gradually change from one style to another.
- CSS transitions let you decide which properties to animate (by *listing them explicitly*), when the animation will start (by setting a *delay*), how long the transition will last (by setting a *duration*), and how the transition will run (by defining a *timing function*, e.g. linearly or quick at the beginning, slow at the end).

Syntax:

```
transition: <property> <duration> <timing-function> <delay>;
or
transition-property: width;
transition-duration: 1s;
transition-timing-function: linear / ease / ease-in / ease-out / ease-in-out / step-start / step-end;
transition-delay: 2s
```

Example: Transitioning width

```
div {
    height: 100px;
    width: 100px;
    transition: width 2s;
    background: red;
}
div:hover {
    transition: width 2s;
    width: 300px;
    background: blue;
}
```

Example: Multiple Transitions (Transitioning Width, Height & Transform)

```
div {
    width: 100px;
    height: 100px;
    background: red;
    transition: width 2s, height 2s, transform 2s;
```

```
div:hover {
  width: 200px;
  height: 200px;
  transform: rotate(180deg);
}
```

Example: Transition using individual Properties

```
<html lang="en" xmlns="http://www.w3.org/1999/xhtml">
<head>
    <meta charset="utf-8" />
    <title>Transitions Demo</title>
    <style>
        div {
            position: absolute;
        }
        div.animate {
            width: 100px;
            height: 100px;
            left: 100px;
            top: 100px;
            background: red;
            border-radius: 50%;
            transition-property: width,height,border-radius,left,top;
            transition-timing-function: ease-out;
            transition-duration: 2s;
        div:hover div#one {
            left: 0px;
            top: 0px;
            width: 20px;
            height: 20px;
            border-radius: 0%;
            transition-delay: 1s;
            transition-duration: 2s;
        }
```

```
div:hover div#two {
            left: 280px;
            top: 0px;
            width: 20px;
            height: 20px;
            border-radius: 0%;
            transition-delay: 1.5s;
            transition-duration: 1s;
       }
       div:hover div#three {
            left: 280px;
            top: 280px;
           width: 20px;
            height: 20px;
            border-radius: 0%;
            transition-delay: 2s;
            transition-duration: 3s;
       }
       div:hover div#four {
           left: 0px;
           top: 280px;
           width: 20px;
           height: 20px;
          border-radius: 0%;
          transition-delay: 2.5s;
           transition-duration: 1s;
    </style>
</head>
<body>
   <div style="border:1px solid grey;width:300px;height:300px">
        <div class="animate" id="one"></div>
        <div class="animate" id="two"></div>
        <div class="animate" id="three"></div>
        <div class="animate" id="four"></div>
   </div>
</body>
```

```
</html>
```

Example: Transitioning effect on Menu

```
.menuButton {
   position: relative;
   transition-property: background-color, color;
   transition-duration: 1s;
   transition-timing-function: ease-out;
   text-align: left;
   background-color: grey;
   left: 5px;
   top: 5px;
   height: 26px;
   color: white;
   border-color: black;
   font-family: sans-serif;
   font-size: 20px;
   text-decoration: none;
   box-shadow: 2px 2px 1px black;
   padding: 2px 4px;
   border: solid 1px black;
}
.menuButton:hover {
   position: relative;
   transition-property: background-color, color;
   transition-duration: 1s;
   transition-timing-function: ease-out;
   background-color: white;
   color: black;
    box-shadow: 2px 2px 1px black;
}
<div class="sidebar">
    <a class="menuButton" href="home">Home</a>
   <a class="menuButton" href="about">About</a>
    <a class="menuButton" href="contact">Contact Us</a>
   <a class="menuButton" href="links">Links</a>
</div>
```