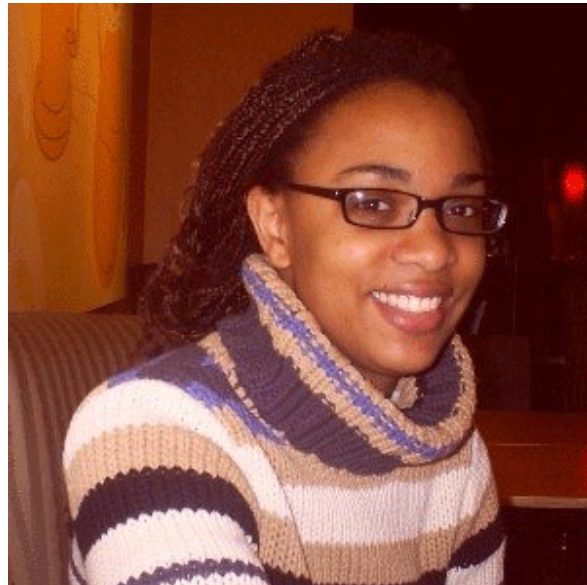


# CSS Animation with Transition and Transform

## CSS Transition Fundamentals



Sandy Ludosky

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# CSS Animation with Transition and Transform



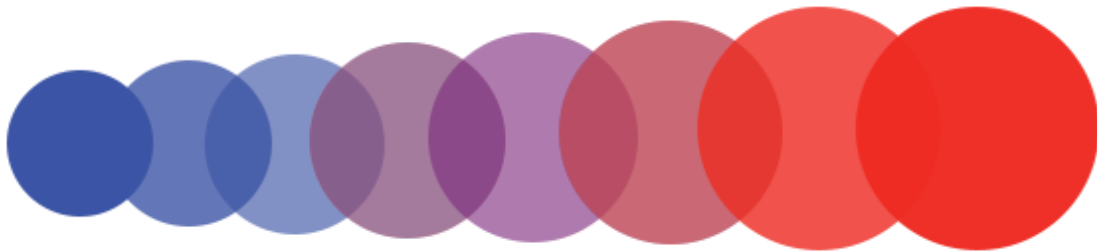
CSS Transition

CSS Transform

# CSS Animation with Transition and Transform

start: blue

end: red



transition-duration: 1s

CSS Transition Properties

2D/3D Transform

CSS Vendor Prefixes

# CSS Animation with Transition and Transform

CSS Transition Fundamentals

CSS Transition & 2D Transform

Animating in 3D

Final Project

Course Requirements

CSS Transition Properties

CSS Transition : how it works ?

Browser Support & Vendor Prefixes

CSS Transition Demos

---

# CSS Transition Fundamentals

## Course Requirements

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# HTML



# CSS



# What You Should Know



No Javascript



# What You Should Know



~~No Javascript~~

# What You Need



Code Editor

**Sublime Text – PC & MAC**

<http://www.sublimetext.com/>

# What You Need



Code Editor

**Text Mate– MAC**

<https://macromates.com/>

# What You Need



Code Editor

**Notepad++ – PC**

<http://notepad-plus-plus.org/>

# What You Need



Modern Browser

**Chrome**

<https://www.google.ca/intl/en/chrome>

# What You Need



Modern Browser

**Firefox**

<https://www.mozilla.org/en-US/firefox/>

# What You Need



Demo Files

**Downloadable zip folder**

# What You Need

Code Editor



Modern Browser



Demo Files





---

# CSS Transition Fundamentals

## CSS Transition Properties

## Definition

CSS Transition allows property changes in CSS

Values to occur smoothly over a specified duration

Source : <http://www.w3.org/TR/css3-transitions/>

**Start**



**Time = 0s**

**Initial State**

**End**



**Time = 0.5s**



**Time = 1s**

**Start**



**Time = 0s**



**Time = 0.5s**

**End**



**Time = 1s**

**Final State**

**Start**



**Time = 0s**



**Time = 0.5s**

**End**



**Time = 1s**

**Intermediate State**

start: red

end: blue



Transition-duration: 1s

# CSS Transition Properties

## Transition-property:

Specifies name or names of CSS Properties to animate

## Transition-duration:

Specifies duration of the animation

## Transition-delay

## Transition-timing-function

---

# CSS Transition Fundamentals

CSS Transition: how it works ?



# The transition-property

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
  
}
```

# The transition-property

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
  
}
```

Initial State

```
.box:hover {  
height: 100px;  
width: 100px;  
background-color: blue;  
  
}
```

Final State

# The transition-property

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
transition-property: background-color;  
}
```

Initial State

```
.box:hover {  
height: 100px;  
width: 100px;  
background-color: blue;  
}
```

Final State

# The transition-property

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
transition-property: background-color;  
}
```

Initial State

```
.box: hover {  
height: 100px;  
width: 100px;  
background-color: blue;  
}
```

Final State

# The transition-property

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
transition-property: background-color;  
}
```

Initial State

```
.box:hover {  
height: 100px;  
width: 100px;  
background-color: blue;  
}
```

Final State

## Definition

CSS Transition allows property changes in CSS

Values to occur smoothly over a specified duration

Source : <http://www.w3.org/TR/css3-transitions/>

# The transition-duration

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
transition-property: background-color;  
transition-duration: 1s;  
}
```

Initial State

```
.box:hover {  
height: 100px;  
width: 100px;  
background-color: blue;  
}
```

Final State

---

# CSS Transition Fundamentals

## Browser Support and Vendor Prefixes



Cross-browser compatibility

Experimental implementation (e.g working draft)

# The Vendor Prefixes

- **webkit** - //Chrome, Safari
- **moz** - // Firefox
- **o** - // Opera
- **ms** - // Microsoft Internet Explorer
- standard property**

# The Vendor Prefixes

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
transition-property: background-color;  
-webkit-transition-property: background-color; }  
-moz-transition-property: background-color;  
-o-transition-property: background-color;  
-ms-transition-property: background-color;  
transition-duration: 1s;  
}
```

```
.box:hover {  
height: 100px;  
width: 100px;  
background-color: blue;
```

# The Vendor Prefixes

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
transition-duration: 1s;  
-webkit-transition-property: background-color; }  
-moz-transition-property: background-color;  
-o-transition-property: background-color;  
-ms-transition-property: background-color;  
transition-property: background-color;  
}
```

```
.box:hover {  
height: 100px;  
width: 100px;  
background-color: blue;
```

# The Vendor Prefixes

```
.box {  
height: 100px;  
width: 100px;  
background-color: red;  
transition-duration: 1s;  
-webkit-transition-property: background-color; }  
-moz-transition-property: background-color;  
-o-transition-property: background-color;  
-ms-transition-property: background-color;  
transition-property: background-color;  
}
```

```
.box: hover {  
height: 100px;  
width: 100px;  
background-color: blue;
```

# The Vendor Prefixes

```
.box {  
  height: 100px;  
  width: 100px;  
  background-color: red;  
  transition-property: background-color;  
  -webkit-transition-property: background-color;  
  -moz-transition-property: background-color;  
  -o-transition-property: background-color;  
  -ms-transition-property: background-color;  
  -webkit-transition-duration: 1s;  
  -moz-transition-duration: 1s;  
  -o-transition-duration: 1s;  
  -ms-transition-duration: 1s;  
  transition-duration: 1s;  
}
```

---

# CSS Transition Demos

CSS Transition Properties

Vendor Prefixes

---

# CSS Animation with Transition and Transform

CSS Transition Properties

CSS Transition & 2D Transform