**CIT 261 – Week 08 Notes**

Transforms

You can use transforms to manipulate items on the page. You can move, rotate, scale and skew them. This can be done using the various html tags.

1. Translate

transform: translate(45px, -45px); // +right/-left, +down/-up

transform: translateX(45px) // x-axis only

transform: translateY(45px) // y-axis only

2. Rotate

transform: scale(1.5, 0.25) // scale(x-axis, y-axis)

transform: scaleX(1.5) // x-axis only

transform: scaleY(1.5) // y-axis only

3. Scale

transform: rotate(10deg) // rotates clockwise

4. Skew

transform: skew(15deg, 4deg)

\*Pay attention to the order of transforms. Order does matter. Rotate followed by translate will move on a rotated axis. Translate followed by rotate will move then rotate.

Transitions

1. Defined using CSS.

2. transition-property defines the CSS properties of the element that should be transitioned.

3. transition-duration defines the amount of time to perform the transition. Not all things can have a duration.

4. transition-delay defines how long until the transition starts. This is good to prevent a transition when just moving across the element, rather than staying on (hovering) on the element.

5. You can have multiple transitions defined for an element.

6. Some things you can transition:

a. Color

b. transparency

c. translate

Animations

Use hover to apply style when hovering over the field.

Canvas

Canvas is used to drawing shapes, lines, colors, pretty much anything.

var canvas = document.getElementById("myCanvas");

var context = canvas.getContext("2d"); // 2d used for drawing in 2 dimensions

The object returned is an instance of CanvasRenderingContext2D. AKA - the context object

1. strokeStyle

2. fillStyle

context.strokeStyle = "red"; // sets teh stroke border

context.fillStyle = "blue"; //sets the stroke or fill color

context.fillStyle = "rgba(0, 0, 255, 0.5)"; // blue fill with a 50% opacity

context.fillRect(10, 10, 100, 100); // start at 10px from top and left, end at 100px to the right and down

context.strokeRect(10, 10, 100, 100); // start at 10px from top and left, end at 100px to the right and down

3. Coordinate System

x-axis is positive going to the right

y-axis is positive going down

4. CanvasPattern

Putting an image into the canvas

function drawPattern() {

var canvas = document.getElementById("demo2");

var context = canvas.getContext("2d");

context.strokeStyle = "red";

var img = new Image();

img.src = "../images/bg-bike.png"; // starts downloading the image

img.onload = function() { // us onload to create the pattern after the file has downloaded

var pattern = context.createPattern(img, "repeat");

context.fillStyle = pattern;

context.fillRect(10, 10, 100, 100);

context.strokeRect(10, 10, 100, 100);

};

}

Questions for Weekly Call:

1. How do I add a .png file as a button inside a table? I want to have a red "X" as my delete button to remove items from my ToDo List.

2. How do I make my fields inside the table links so I can click on the field and edit it and then have it save in memory?