Documentation for Week 8

HTML5 Tags - Video, Audio, and Canvas

# Video

Videos can be added to a webpage by using the <video> tag. As an example:

<video width="320" height="240" controls>

<source src="eloisevid.mp4" type="video/mp4">

</video>

Inside the <video> tag you can set styles for the video or use css to control the style. The controls attribute allows you to show or hide the controls, ie play, pause, volume, for the video.

The source attribute sets the source of the video you can use mp4, webM, and ogg file types.

Text between the <video> tags will only be displayed on browsers that don’t support the video element.

The autoplay attribute will cause videos to play automatically once the page loads.

# Audio

<div class="audio">

<audio controls>

<source src="test.mp3" type="audio/mp3">

</audio>

</div>

The <audio> tag is similar to the video tag. You can set different attributes, i.e. controls, autoplay. It supports mp3 and ogg audio formats. Also text inbetween the audio tags will only display on browsers that don’t support the audio element.

# Canvas

The canvas element allows you to create graphics using JavaScript.

<canvas id="myCanvas" width="400" height="200" style="border:1px solid #000000;">

</canvas>

Here is some example JavaScript to make changes to canvas. First example creates random lines, the second example clears the canvas, and the third example draws random circles.

document.getElementById("drawLinesBtn").addEventListener("click", function drawLines() {

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

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

context.moveTo(Math.random() \* 400, Math.random() \* 200);

context.lineTo(Math.random() \* 400, Math.random() \* 200);

context.stroke();

})

document.getElementById("clearCanvasBtn").addEventListener("click", function clearCanvas() {

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

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

context.clearRect(0, 0, canvas.width, canvas.height);

});

document.getElementById("drawCirclesBtn").addEventListener("click", function drawCircle() {

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

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

context.beginPath();

context.arc(Math.random() \* 400, Math.random() \* 200, Math.random() \* 100 + 1, 0, 2\*Math.PI, false);

context.stroke();

});