

The HTML5 Canvas

Canvas styles

`fillColor` and `strokeColor`

Using the Canvas

```
var canvas = document.getElementById('the-canvas');  
var canvasCtx = canvas.getContext('2d');  
canvasCtx.fillRect(10, 10, 30, 30);
```

Drawing Rects

```
context.fillRect(x, y, width, height)  
context.strokeRect(x, y, width, height)
```

Canvas Paths

```
1=> beginPath()  
2=> moveTo(x, y)
```

Changes the position of the path marker

```
lineTo(x, y)
```

Draws a straight line from the position of the path marker to position (x, y)

```
fill() / stroke()
```

Drawing Ellipses

```
arc(x, y, radius, from, to, counterclockwise)
```

The degrees to radians formula is: **radians = degrees * PI/180**

2 * PI = 360, 0.5 * PI = 90, PI = 180, 1.5 * PI = 270

Drawing Curves

```
context.quadraticCurveTo(cx, cy, ex, ey)
```

Drawing Text

`context.fillText` (text, x, y) – fills the given text

`context.strokeText` (text, x, y)

`context.font` – sets the font size and font family of the text

`context.fillStyle` – the fill color of the text

`context.strokeStyle`

Transformations

context.[scale](#)(dx, dy) – all coordinates and points are scaled

[fillRect](#)(X, X, W, H) will draw a rectangle

At position (**dx * X, dy * Y**)

With width (dx* W) and height (dy* H)

context.[rotate](#)(D) – all drawing is rotated with angle D degrees

context.getImageData(x, y, w, h)