

# HTML5 Canvas Cheat Sheet v1.x

<http://blog.nihilogic.dk/>

## Canvas element

### Attributes

Name	Type	Default
<b>width</b>	<i>unsigned long</i>	300
<b>height</b>	<i>unsigned long</i>	150

### Methods

Return	Name
<i>string</i>	<b>toDataURL</b> ([Optional] <i>string type</i> , [Variadic] <i>any args</i> )
<i>Object</i>	<b>getContext</b> ( <i>string contextId</i> )

## 2D Context

### Attributes

Name	Type	Default
<b>canvas</b>	<i>HTMLCanvasObject</i>	[readonly]

### Methods

Return	Name
<i>void</i>	<b>save</b> ()
<i>void</i>	<b>restore</b> ()

## Transformation

### Methods

Return	Name
<i>void</i>	<b>scale</b> ( <i>float x</i> , <i>float y</i> )
<i>void</i>	<b>rotate</b> ( <i>float angle</i> )
<i>void</i>	<b>translate</b> ( <i>float x</i> , <i>float y</i> )
<i>void</i>	<b>transform</b> ( <i>float m11</i> , <i>float m12</i> , <i>float m21</i> , <i>float m22</i> , <i>float dx</i> , <i>float dy</i> )
<i>void</i>	<b>setTransform</b> ( <i>float m11</i> , <i>float m12</i> , <i>float m21</i> , <i>float m22</i> , <i>float dx</i> , <i>float dy</i> )

## Image drawing

### Methods

Return	Name
<i>void</i>	<b>drawImage</b> ( <i>Object image</i> , <i>float dx</i> , <i>float dy</i> , [Optional] <i>float dw</i> , <i>float dh</i> )
Argument <b>image</b> can be of type <i>HTMLImageElement</i> , <i>HTMLCanvasElement</i> or <i>HTMLVideoElement</i> .	
<i>void</i>	<b>drawImage</b> ( <i>Object image</i> , <i>float sx</i> , <i>float sy</i> , <i>float sw</i> , <i>float sh</i> , <i>float dx</i> , <i>float dy</i> , <i>float dw</i> , <i>float dh</i> )

## Compositing

### Attributes

Name	Type	Default
<b>globalAlpha</b>	<i>float</i>	1.0
<b>globalCompositeOperation</b>	<i>string</i>	source-over

Supports any of the following values:



source-over



source-in



source-out



source-atop



destination-over



destination-in



destination-out



destination-atop



lighter



copy



xor

## Line styles

### Attributes

Name	Type	Default
<b>lineWidth</b>	<i>float</i>	1.0
<b>lineCap</b>	<i>string</i>	butt

Supports any of the following values:



butt



round



square

**lineJoin** *string*

Supports any of the following values:

miter



round



bevel



miter

**miterLimit** *float* 10

## Colors, styles and shadows

### Attributes

Name	Type	Default
<b>strokeStyle</b>	<i>any</i>	black
<b>fillStyle</b>	<i>any</i>	black
<b>shadowOffsetX</b>	<i>float</i>	0.0
<b>shadowOffsetY</b>	<i>float</i>	0.0
<b>shadowBlur</b>	<i>float</i>	0.0
<b>shadowColor</b>	<i>string</i>	transparent black

### Methods

Return	Name
<i>CanvasGradient</i>	<b>createLinearGradient</b> ( <i>float x0</i> , <i>float y0</i> , <i>float x1</i> , <i>float y1</i> )
<i>CanvasGradient</i>	<b>createRadialGradient</b> ( <i>float x0</i> , <i>float y0</i> , <i>float r0</i> , <i>float x1</i> , <i>float y1</i> , <i>float r1</i> )
<i>CanvasPattern</i>	<b>createPattern</b> ( <i>Object image</i> , <i>string repetition</i> )
<i>image</i> is <i>HTMLImageElement</i> or <i>HTMLCanvasElement</i> .	
<i>repetition</i> supports any of the following values:	
repeat (default) repeat-x repeat-y no-repeat	

### CanvasGradient interface

Return	Name
<i>void</i>	<b>addColorStop</b> ( <i>float offset</i> , <i>string color</i> )

### CanvasPattern interface

No attributes or methods.

## Paths

### Methods

Return	Name
<i>void</i>	<b>beginPath()</b>
<i>void</i>	<b>closePath()</b>
<i>void</i>	<b>fill()</b>
<i>void</i>	<b>stroke()</b>
<i>void</i>	<b>clip()</b>
<i>void</i>	<b>moveTo(float x, float y)</b>
<i>void</i>	<b>lineTo(float x, float y)</b>
<i>void</i>	<b>quadraticCurveTo(float cpx, float cpy, float x, float y)</b>
<i>void</i>	<b>bezierCurveTo(float cp1x, float cp1y, float cp2x, float cp2y, float x, float y)</b>
<i>void</i>	<b>arcTo(float x1, float y1, float x2, float y2, float radius)</b>
<i>void</i>	<b>arc(float x, float y, float radius, float startAngle, float endAngle, boolean anticlockwise)</b>
<i>void</i>	<b>rect(float x, float y, float w, float h)</b>
<i>boolean</i>	<b>isPointInPath(float x, float y)</b>

## Text

### Attributes

Name	Type	Default
<b>font</b>	<i>string</i>	10px sans-serif
<b>textAlign</b>	<i>string</i>	start
Supports any of the following values: start end left right center		
<b>textBaseline</b>	<i>string</i>	alphabetic
Supports any of the following values: top hanging middle alphabetic ideographic bottom		

### Methods

Return	Name
<i>void</i>	<b>fillText(string text, float x, float y, [Optional] float maxWidth)</b>
<i>void</i>	<b>strokeText(string text, float x, float y, [Optional] float maxWidth)</b>
<i>TextMetrics</i>	<b>measureText(string text)</b>

### TextMetrics interface

Name	Type	Default
<b>width</b>	<i>float</i>	[readonly]

## Rectangles

### Methods

Return	Name
<i>void</i>	<b>clearRect(float x, float y, float w, float h)</b>
<i>void</i>	<b>fillRect(float x, float y, float w, float h)</b>
<i>void</i>	<b>strokeRect(float x, float y, float w, float h)</b>

## Pixel manipulation

### Methods

Return	Name
<i>ImageData</i>	<b>createImageData(float sw, float sh)</b>
<i>ImageData</i>	<b>getImageData(float sx, float sy, float sw, float sh)</b>
<i>void</i>	<b>putImageData(ImageData imagedata, float dx, float dy, [Optional] float dirtyX, float dirtyY, float dirtyWidth, float dirtyHeight)</b>

### ImageData interface

Name	Type	Default
<b>width</b>	<i>unsigned long</i>	[readonly]
<b>height</b>	<i>unsigned long</i>	[readonly]
<b>data</b>	<i>CanvasPixelArray</i>	[readonly]

**CanvasPixelArray interface**

Name	Type	Default
<b>length</b>	<i>unsigned long</i>	[readonly]

Source: <http://www.whatwg.org/specs/web-apps/current-work/> (2009-02-26)  
This is a modified version of <http://blog.nihilogic.dk/2009/02/html5-canvas-cheat-sheet.html>