

# katan-js docs

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## Katan

### Katan(*id*, *width*, *height*)

Parameter	Type	Description
<i>id</i>	{String}	DOM element #id that will become the SVG canvas
<i>width</i>	{Number}	width of the SVG canvas
<i>height</i>	{Number}	height of the SVG canvas

```
var k = new Katan("canvas-id", 300, 400);
```

#### Katan().getId()

Returns	Description
{String}	Returns the <i>id</i> of the <b>Katan</b> object

```
k.getId();  
// "canvas-id"
```

#### Katan().getCanvas()

Returns	Description
{Object}	Returns a Raphael.js <i>Paper</i> object, which is used as the canvas for creating other <b>Katan</b> objects

```
var c = k.getCanvas();
```

Documentation for Raphaël can be found at <http://dmitrybaranovskiy.github.io/raphael/>

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## Katan.HexTile

### Katan.HexTile(*canvas*, *options*)

Parameter	Type	Description
<i>canvas</i>	{Object}	A Raphael <i>Paper</i> object (see Katan().getCanvas())
<i>options</i>	{Object}	[Optional] A configuration object to override default object properties

```
var hextile = new Katan.HexTile(c, {cx: 90, cy: 52});
```

#### Katan.HexTile().getOptions()

Returns	Description
{Object}	Returns an options object containing all the options currently set for the object

```
var hextile = new Katan.HexTile(c);  
var options = hextile.getOptions();
```

The default options are as follows:

```
var defaults = {  
  cx      : 0,      // absolute x-axis transform  
  cy      : 0,      // absolute y-axis transform  
  fill    : "#2980B9", // hextile fill color; default is belizehole  
  stroke  : "none",  // hextile stroke color  
  strokeWidth : 0,    // hextile stroke width  
  
  innerCircle : false, // boolean for displaying inner circle element  
  innerCircleFill : "#ECF0F1", // inner circle fill color; default is clouds  
  innerCircleStroke : "none",  // inner circle stroke color  
  innerCircleStrokeWidth : 0,   // inner circle stroke width  
  textFill    : "#2980B9", // inner circle text color; default is belizehole  
  fontSize    : 18,        // inner circle font size  
  fontWeight  : 400,       // inner circle font weight  
  
  resourceIcon : "",      // inner circle resource type; valid options  
                  // are: brick, desert, grain, lumber, ore, wool  
  
  state      : false,    // boolean for enabling inner circle clickable state  
  stateCursor : "pointer", // inner circle cursor on hover  
  stateFill   : "#9B59B6", // inner circle fill color when state is true; default is amethyst  
  stateStroke : "#ECF0F1", // inner circle stroke color when state is true; default is clouds  
  stateStrokeWidth : 2,    // inner circle stroke color when state is true  
  stateTextFill : "#ECF0F1", // inner circle text color when state is true; default is clouds  
  stateFontSize : 18,      // inner circle font size when state is true  
  stateFontWeight : 400,   // inner circle font weight when state is true  
  
  scale : [], // hextile scale array  
  rotate : [], // hextile rotate array  
  
  // only override this if you know what you're doing!  
  // this takes a Raphael Paper.path() string  
  // http://dmitrybaranovskiy.github.io/raphaeljs.com/reference.html#Paper.path  
  _coords : "M0,52 L30,0 L90,0 L120,52 L90,104 L30,104z"  
};
```

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## Katan.Road

### Katan.Road(*canvas*, *options*)

Parameter	Type	Description
<i>canvas</i>	{Object}	A Raphael <i>Paper</i> object (see Katan().getCanvas())
<i>options</i>	{Object}	[Optional] A configuration object to override default object properties

```
var road = new Katan.Road(c, {  
  cx: 45,  
  cy: 35,  
  state: true,  
  rotate: [300]  
});
```

#### Katan.Road().getOptions()

Returns	Description
{Object}	Returns an options object containing all the options currently set for the object

The default options are as follows:

```
var defaults = {  
  cx      : 0,      // absolute x-axis transform  
  cy      : 0,      // absolute y-axis transform  
  w       : 28,     // width of the road  
  h       : 14,     // height of the road  
  fill    : "#ECF0F1", // road fill color; default is clouds  
  stroke  : "#2C3E50", // road stroke color; default is midnightblue  
  strokeWidth : 2,    // road stroke width  
  
  text      : '1',    // road text value  
  textFill  : "#2C3E50", // road text color; default is midnightblue  
  fontSize  : 12,     // road font size  
  fontWeight : 700,   // road font weight  
  
  state      : false, // boolean for enabling inner circle clickable state  
  stateCursor : "pointer", // inner circle cursor on hover  
  stateFill   : "#9B59B6", // inner circle fill color when state is true; default is amethyst  
  stateStroke : "#ECF0F1", // inner circle stroke color when state is true; default is clouds  
  stateStrokeWidth : 2,    // inner circle stroke color when state is true  
  stateTextFill : "#ECF0F1", // inner circle text color when state is true; default is clouds  
  stateFontSize : 12,      // inner circle font size when state is true  
  stateFontWeight : 700,   // inner circle font weight when state is true  
  
  scale : [], // road scale array  
  rotate : [] // road rotate array  
};
```

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## Katan.Knight

### Katan.Knight(*canvas*, *options*)

Parameter	Type	Description
<i>canvas</i>	{Object}	A Raphael <i>Paper</i> object (see Katan().getCanvas())
<i>options</i>	{Object}	[Optional] A configuration object to override default object properties

```
var knight = new Katan.Knight(c, {  
  cx: 33,  
  cy: 65,  
  text: '1'  
});
```

#### Katan.Knight().getOptions()

Returns	Description
{Object}	Returns an options object containing all the options currently set for the object

The default options are as follows:

```
var defaults = {  
  cx      : 0,      // absolute x-axis transform  
  cy      : 0,      // absolute y-axis transform  
  fill    : "#ECF0F1", // knight fill color; default is clouds  
  stroke  : "#2C3E50", // knight stroke color; default is midnightblue  
  strokeWidth : 2,    // knight stroke width  
  
  text      : '1',    // knight text value  
  textFill  : "#2C3E50", // knight text color; default is midnightblue  
  fontSize  : 12,     // knight font size  
  fontWeight : 700,   // knight font weight  
  
  state      : false, // boolean for enabling inner circle clickable state  
  stateCursor : "pointer", // inner circle cursor on hover  
  stateFill   : "#9B59B6", // inner circle fill color when state is true; default is amethyst  
  stateStroke : "#ECF0F1", // inner circle stroke color when state is true; default is clouds  
  stateStrokeWidth : 2,    // inner circle stroke color when state is true  
  stateTextFill : "#ECF0F1", // inner circle text color when state is true; default is clouds  
  stateFontSize : 12,      // inner circle font size when state is true  
  stateFontWeight : 700,   // inner circle font weight when state is true  
  
  scale : [], // knight scale array  
  rotate : [] // knight rotate array  
};
```

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## Katan.Settlement

### Katan.Settlement(*canvas*, *options*)

Parameter	Type	Description
<i>canvas</i>	{Object}	A Raphael <i>Paper</i> object (see Katan().getCanvas())
<i>options</i>	{Object}	[Optional] A configuration object to override default object properties

```
var settlement = new Katan.Settlement(c, {  
  cx: 114,  
  cy: 90,  
  text: '3'  
});
```

#### Katan.Settlement().getOptions()

Returns	Description
{Object}	Returns an options object containing all the options currently set for the object

The default options are as follows:

```
var defaults = {  
  cx      : 0,      // absolute x-axis transform  
  cy      : 0,      // absolute y-axis transform  
  fill    : "#ECF0F1", // settlement fill color; default is clouds  
  stroke  : "#2C3E50", // settlement stroke color; default is midnightblue  
  strokeWidth : 2,    // settlement stroke width  
  
  text      : '',     // settlement text value  
  textFill  : "#2C3E50", // settlement text color; default is midnightblue  
  fontSize  : 12,     // settlement font size  
  fontWeight : 700,   // settlement font weight  
  
  state      : false, // boolean for enabling inner circle clickable state  
  stateCursor : "pointer", // inner circle cursor on hover  
  stateFill   : "#9B59B6", // inner circle fill color when state is true; default is amethyst  
  stateStroke : "#ECF0F1", // inner circle stroke color when state is true; default is clouds  
  stateStrokeWidth : 2,    // inner circle stroke color when state is true  
  stateTextFill : "#ECF0F1", // inner circle text color when state is true; default is clouds  
  stateFontSize : 12,      // inner circle font size when state is true  
  stateFontWeight : 700,   // inner circle font weight when state is true  
  
  scale : [], // settlement scale array  
  rotate : [], // settlement rotate array  
  
  // only override this if you know what you're doing!  
  // this takes a Raphael Paper.path() string  
  // http://dmitrybaranovskiy.github.io/raphaeljs.com/reference.html#Paper.path  
  _coords : "M0,8 L8,0 L16,8 L24,0 L24,21 L0,21z"  
};
```

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## Utility Functions

### Katan.version

Returns	Description
{String}	Returns the current version of the <b>katan-js</b> library

```
katan.version;  
// "1.0.0"
```

### Katan.getColors()

Returns	Description
{Object}	Returns an object with all the default color <i>key: value</i> pairs in the format <i>name: #hexcode</i>

```
var colors = Katan.getColors();  
colors.amethyst;  
// "#9B59B6"
```

Color.Key	Hexcode	Preview
turquoise	#1ABC9C	<div></div>
greensea	#16A085	<div></div>
emerald	#2ECC71	<div></div>
nephritis	#27AE60	<div></div>
peterriver	#3498DB	<div></div>
belizehole	#2980B9	<div></div>
amethyst	#9B59B6	<div></div>
wisteria	#8E44AD	<div></div>
wetaspalt	#34495E	<div></div>
midnightblue	#2C3E50	<div></div>
sunflower	#F1C40F	<div></div>
orange	#F39C12	<div></div>
carrot	#E67E22	<div></div>
pumpkin	#D35400	<div></div>
alizarin	#E74C3C	<div></div>
pomegranate	#C0392B	<div></div>
clouds	#ECF0F1	<div></div>
silver	#BDC3C7	<div></div>
concrete	#95A5A6	<div></div>
asbestos	#7F8C8D	<div></div>

Colors are taken from FlatUI and color swatches can be viewed using the webapp at <http://flatuicolors.com/>

### Katan.isKatan(*obj*)

Parameter	Type	Returns	Description
<i>obj</i>	{Object}	{Bool}	Returns true if the object is a <b>Katan</b> object or instance

```
Katan.isKatan(k);  
// true
```

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