

# Styling Maps Using CartoCSS

With CartoCSS you style a layer by setting properties on a layer's features. You do this by writing a series of statements. A statement takes the following form:

```
selector {  
    property: value;  
}
```

Use as many property-value pairs in a statement as is necessary.

## *Common properties*

### **Markers (points)**

marker-fill	inner part's color (color string)
marker-fill-opacity	inner part's opacity (0 to 1, lower is less visible)
marker-line-color	outer part's color
marker-line-opacity	outer part's opacity
marker-height	height (number, pixels)
marker-width	width (number, pixels)
marker-allow-overlap	draw all markers, even if they'll overlap (true/false)

### **Lines**

line-color	color of line (color string)
line-width	width of line (number, pixels)
line-opacity	opacity of line (see marker-fill-opacity)

### **Polygons**

polygon-fill	color of inside of polygon
polygon-opacity	opacity of inside of polygon

(Style the outside of polygons using `line-*` properties.)

See all properties in the official documentation: <http://bit.ly/cartocss-docs>

## ***Advanced selectors***

### **Selectors**

You need to select a layer in order to style the features on that layer. In CartoDB, this is just the name of the table you are styling, followed by #. So if you uploaded a table called mysecretlocations, you could give all the markers on that layer a width of 3 using this statement:

```
#mysecretlocations {  
    marker-width: 3;  
}
```

### **Conditional selectors**

Style by the **zoom level** of the map:

```
#layer-name[zoom >= 5] { ... }
```

Style features by their **attributes**:

```
#layer-name[attribute = value] { ... }
```

for example, if the attribute (column in CartoDB) is text:

```
#buildings[state = 'New York'] { ... }
```

If the column is a number:

```
#buildings[height > 50] { ... }
```

Use any of the following in your conditional selectors:

- = (equal),
- != (not equal),
- >= (greater than or equal),
- <= (less than or equal),
- > (greater than),
- < (less than)

### **Multiple statements**

You will likely use multiple statements on one map:

```
#layer-name[zoom >= 5] { ... }  
#layer-name[zoom >= 10] { ... }
```

```
#layer-name[zoom >= 15] { ... }
```

but it is equivalent and preferred that these statements are *nested*:

```
#layer-name {  
    [zoom >= 5] { ... }  
    [zoom >= 10] { ... }  
    [zoom >= 15] { ... }  
}
```