# A Cheat Sheet for SnapSVG

## 1 Conventions

```
codeWord
                    code word
                    variable
variable
attrNameValue
                    attribute name-value "arrtName: arrtValue,"
                    attribute name (Sec. 5.1)
arrtName
                    attribute value (Sec. 5.1)
arrtValue
object
                    SVG object
                    point P_i at (x_i, y_i)
x_i, y_i
                    control point P_i^c at (x_i^c, y_i^c)
x_i^c, y_i^c
                    center point P_C at (cx, cy)
cx, cy
                    width
h
                    height
                    radius
                    string in qoute "a" or 'a'
string
                    aaa
                    aaa
                    x axis rotation (Sec. 3.1)
                    large arc flag (Sec. 3.1)
f_{la}
                    sweep flag (Sec. 3.1)
```

## 2 Objects

```
\begin{split} & \text{line}(x_1, y_1, x_2, y_2) \\ & \text{rect}(x_1, y_1, w, h) \\ & \text{circle}(cx, cy, r) \\ & \text{ellipse}(x_1, y_1, x_2, y_2) \\ & \text{polyline}(x_1, y_1, x_2, y_2, \dots, x_N, y_N) \\ & \text{polygon}([x_1, y_1, x_2, y_2, \dots, x_N, y_N]) \\ & \text{path (Sec. 3)} \\ & \text{text (Sec. 4)} \end{split}
```

#### 2.1 Attributes

```
\begin{array}{ll} {\rm stroke} & color \\ {\rm strokeWidth} & number \\ {\rm strokeOpacity} & opacity \\ {\rm fill} & color \end{array}
```

#### 3 Path

 $\mathtt{path}(pathDescription)$ 

See https://www.w3.org/TR/SVG/paths.html#PathData

## 3.1 Path Description

```
move to point P_1 at (x_1, y_1)
M x_1 y_1
Z
                               close path
                               line to point P_2 at (x_2, y_2)
L x_2 y_2
                               horizontal line to P_2 at (x_2, y_1)
Hx_2
                               vertical line to P_2 at (x_1, y_2)
v_i
                               curve to P_2 with control points P_1^c and P_2^c
C x_1^c y_1^c x_2^c y_2^c x_2 y_2
S x_2 y_2 ? ?
                               smooth curve to point P_2 at (x_2, y_2)
Q x_1^c y_1^c x_2 y_2
                               quadratic Bezier to point P_2 at (x_2, y_2)
T ??
                               smooth quadratic Bezier to
A r_x r_y \beta_r f_{la} f_s x_2 y_2
                              elliptic arc ending at (x_2, y_2)
```

#### 3.2 Attributes

```
\begin{array}{c} \text{in addition to Sec. 2.1} \\ \text{strokeDasharray} & \text{``5,1,2'',} \dots \end{array}
```

#### 4 Text

```
\begin{array}{ll} \mathtt{text}(x_i, y_i, string) \\ x_i, y_i & \text{starting point at } (x_i, y_i) \\ string & \text{text in qoute} \end{array}
```

#### 4.1 Attributes

```
in addition to Sec. 2.1
```

 $\begin{array}{ll} \mbox{fontFamily} & fontFamily \\ \mbox{fontSize} & fontSize \\ \mbox{fontStyle} & fontStyle \\ \mbox{fill} & color \end{array}$ 

## 5 Attribute

```
element.attr(\{attrName : attrValue,...\}) set value a = element.attr().attrName; get value
```

#### 5.1 Some Attribute Names

```
number
             number
У
СX
             number
             number
су
cursor
             cursor
stroke
             color
fill
             color
             fontFamily
fontFamily
fontSize
             fontSize
```

### 5.2 Some Attribute Values

```
number
               "any_positive_number"
color
               "red", "blue", "green",
cursor
               "pointer",
fontFamily
               "Sans-Serif"
               "normal", "italic", "oblique", "inherit"
fontStyle
fontSize
               "12px", ...
               "normal", "bold", "bolder", "lighter",
fontWeight
               "100", ..., "900"
               "n" where 0 \le n \le 1
opacity
```

Haluk O. Bingol bingol@boun.edu.tr ©2021

Permission is granted to make and distribute copies of this card Provided the copyright notice and this permission notice are preserved on all copies. https://github.com/halukbingol/zintCheatSheet-SnapSVG

v2021-02-03T15:30:58