## PROCESSING CHEAT SHEET

Content for this cheat sheet provided from http://www.surattack.com Additional resources can be found at: http://www.processing.org/

```
Structure
void setup()
{ // runs only once.
}
void draw()
{ // runs repeatedly.
}
```


## Comments/Debug

/* this is a multiline
comment. nothing between
here will be run or
executed */
// this is a single
// line comment

## Data \Variable Types

 void (null return)int (integer - 32,768 to 32,767 )
float (floating point / decimal numbers) String (array of characters)


## Basic Logic

If(mathematical statement)
\{
//true statement code here
\}
else
\{
//false statement code here \}

## Basic Functions

size(width, height);
Sets main window size in pixels.
background(color);
Sets window background color..
frameRate (fps);
Sets the applications FPS
print(string);
Writes a string to the Console.
println(string);
Writes a string to the Console with a CRLF.
delay(milliseconds); Places a wait or delay in milliseconds.

## Global Variables

width: Returns sketch's width in pixels
height: Returns sketch's height in pixels
mouseX, mouseY: Returns the current mouse pointer's X or Y axis coordinate
pmouseX, pmouseY : Returns
previous mouse pointer's X or Y axis
coordinate
frameCount : Return's sketch's current frame.
frameRate : Returns sketch's current FPS.

## Other shapes

point(x1, yl);
triangle(x1, y1, x2, y2,
x3, y3);
quad(x1, y1, x2, y2, x3, y3, $x 4, y^{4}$;

## Shapes Border, Stroke, \& Fill

fill (red, green, blue);
Sets the filling color for next shape to draw 0-255.
noFill();
Disables filling for the next shape.
stroke (Red, Green, Blue);
Sets the stroke/border color for next shape to draw 0-255.

## noStroke () ;

Disables border for the next shape as well as lines.

Coordinate System


Top left corner of each sketch is the $(0,0)$ point. That axis changes when we make use of the translate () function.

Minimum measurement unit in a computer screen is a Pixel

Basic Geometry
Anchor point

ellipse (x,y, w,h);
Draws an ellipse centered in positiion ( $x, y$ ) and with size "width"(w) and "height"( $h$ ).
$\square$
rect (x, y, w, h);
Draws a rect anchored at the top left corner, in position ( $x, y$ ) and with a size "width" (w) and "height" (h).

line (x1, y1, x2, y2);
Draws a line from ( $\mathrm{x} 1, \mathrm{y} 1$ ) to $(\mathrm{x} 2, \mathrm{y} 2)$

Time \& Date
day ();
Returns the numeric day of the month.
hour () ;
Returns the current hour.
minute();
Returns the current minute.
second();
Returns the current second.

