

Processing Community Day Copenhagen 2020 - p5 workshop - cheatsheet

Workshop github page

github.com/kwichmann/p5workshop

Basic graphics

Canvas

`createCanvas(width, height)` Create
`background(r, g, b)` Background color

Points and lines

`point(x, y)` Point at (x, y)
`line(x1, y1, x2, y2)` . From (x_1, y_1) to (x_2, y_2)

Style of points, lines, and outlines

`strokeWeight(size)` Size/width
`stroke(r, g, b)` Color
`noStroke()` Disable

Geometric shapes

`rect(x, y, width, height)` Rectangle at (x, y)
`ellipse(x, y, radius)` . Circle with center (x, y)
`ellipse(x, y, width, height)` Ellipse
`triangle(x1, y1, x2, y2, x3, y3)` ... Triangle

Style of fill

`fill(r, g, b)` Color
`noFill()` Disable

Color arguments

`...(r, g, b)` Red, green, and blue, 0-255
`...(brightness)` .. Grayscale: 0 black, 255 white

Alpha: 0 fully transparent, 255 fully opaque
`...(r, g, b, a)` Red, green, blue with alpha
`...(brightness, a)` Grayscale with alpha

Comments

`// Comment` Note to self. Is not executed

Built-in variables

`width` and `height` Canvas size
`mouseX` and `mouseY` Current mouse position
`pmouseX` and `pmouseY` ... Previous mouse position
`key` Last key pressed

Events

`function mousePressed() {...}` ... Mouse click
`function keyPressed() {...}` . Keyboard input
`function preload() {...}` .. Done before setup

Variables and constants

`let a` Declare variable a
`let b = 5` Declare and assign variable b
`const c = 42` Assign constant c
`d = 3 * a + d` Reassign value to variable d
`n += 3` Add 3 to variable n
`m -= 5` Subtract 4 from variable m
`x *= 2` Multiply variable x by 2
`y /= 7` Divide variable y by 7

Random numbers

`random(max)` Between 0 and max
`random(min, max)` Between min and max

The console

`console.log(x)` . Write the value of x in console

Conditionals

`if (a == 4) {...}` Do if a is exactly 4
`if (b < 60) {...}` Do if b is less than 60
`if (c > -3) {...}` Do if c is more than -3

Else: Do something else when not true

`if (condition) {...} else {...}`

Images

`img = loadImage(path)` Assign to variable
`image(img, x, y)` Show image at (x, y)
`image(img, x, y, height, width)` Set size
`tint(r, g, b)` Color images
`noTint()` Undo image coloring
`imageMode(MODE)` Change display mode
`filter(FILTER)` Use image filter

Webcam

`webcam = createCapture(VIDEO)` Show cam
`webcam.hide()` Hide cam

Sound

`mp3 = loadSound(path)` Assign to variable
`mp3.play()` Play
`mp3.stop()` Stop
`mp3.setVolume(v)` v ranges from 0 to 1
`mp3.rate(r)` .. Playback speed. 1 is original rate
`mp3.pan(p)` p ranges from -1 to 1. 0 is center

Created by Kristian Gårdhus Wichmann, 2020

Based on www.latextemplates.com/template/cheatsheet

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