

# Creative Coding

Custom Shapes, Tesselations, Translation

COD 207 - Week 08 Class →



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# Wrap-up (Summary)

Things we learn about P5JS programming language.

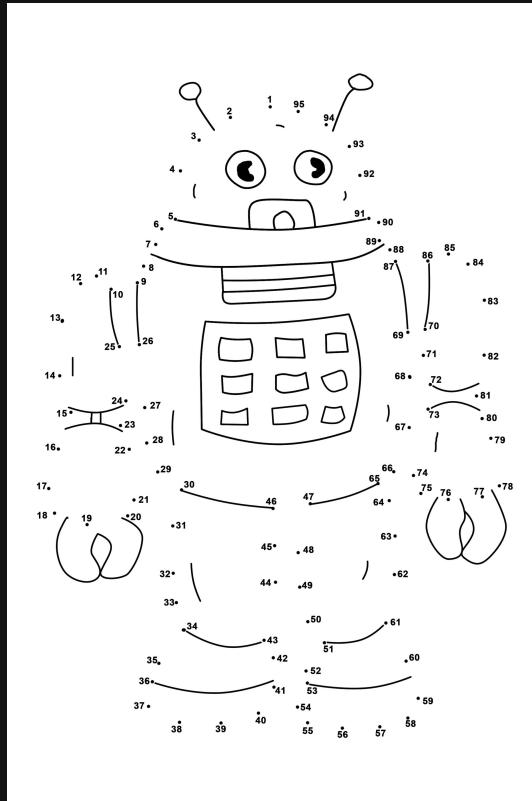
- Cartesian Coordinate System (How canvas positioning works)
- Structure (Built-in functions (`setup`, `draw`) / inline functions (`createWindow`, `background`))
- Variables
- Built-in Variables (`width`, `height`, `mouseX`, `mouseY`, `key`)
- Drawing simple shapes (`circle`, `rect`, `line`)
- Styling (`stroke`, `strokeWeight`, `fill`, `noFill`, etc...)
- Conditionals (If / else, else if)
- Loops & Nested Loops (`for`)
- Interactivity (`mousePressed`, `keyPressed`)

# Custom Shapes

How to draw the following shape?



# Connect The Dots



# beginShape() - endShape() - vertex()

```
1  function setup() {  
2      // Creates the application window params: width  
3      createCanvas(600, 600);  
4  }  
5  
6  function draw() {  
7      background(100,20,20); // R,G,B values must be  
8  
9      strokeWeight(20);      // stroke weight  
10     strokeJoin(ROUND);    // make corner joints round  
11     stroke(245, 208, 120); // stroke color  
12     fill(150, 10, 10);    // fill color  
13  
14     beginShape();          // Start Shape Container  
15     vertex(100, 100);        // 1st point  
16     vertex(width / 2, height - 100); // 2nd point  
17     vertex(width - 100, 100); // 3rd point  
18     vertex(width / 2, 200);        // 5th point  
19     vertex(100, 100);        // Last point  
20     endShape();            // End Shape Container  
21 }
```

source 





# BREAK

10 mins.

# Translate, Rotate, Scale

Move, scale and rotate object on canvas

x

1.4 translate(), rotate(), push(), pop() - p5.js Tutorial



Paylaş

## translate()

## rotate()



## push(), pop()



# Tutorial: Tiling

Move, scale and rotate object on canvas



# Assignments

1. Watch the tutorial videos in the week 08 presentation and practice on your own.
2. Your assignmet is creating another tessellation.
3. Step1 → Design a unique pattern yourself   PTS (E.g:)
4. Step2 → Tile the pattern using nested for loops   PTS (E.g:)
5. Step3 → Randomize the grid elements using translate and rotate functions   PTS (E.g:)
6. Step4 → Generate at least 20 different variations and submit 3 of them of your choice   PTS
7.  Submit the openprocessing link.
8.  Submit the sketch source code as zip file as well.
9.  Read the documents Chapter 6: Translation, Scale, Rotate: and Chapter 7: Media