Graphic P5.js Library Workshop

p5*js
the power of Processing times the reach of JavaScript

Girls & Boys
Programming in Europe Erasmus+

GBPE
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Whats p5.js ?

p5.js is a JavaScript library for creative coding, with a focus on making coding accessible and inclusive for artists, designers, educators, beginners, and anyone else! p5.js is free and open-source because we believe software, and the tools to learn it, should be accessible to everyone.
Using the metaphor of a sketch, p5.js has a full set of drawing functionality. However, you're not limited to your drawing canvas. You can think of your whole browser page as your sketch, including HTML5 objects for text, input, video, webcam, and sound.

Code for the p5.js Workshop

```
var x = 300;
var y = 250;
var r = 10;
var dx = 3;
var dy = 1;
var c = 0;
var Psize=120;

function setup() {
  createCanvas(400, 400);
}

function draw() {
  background(0);
  stroke(255,0,0);
  strokeWeight(5);
  ellipse(x, y, r + r, r + r);

  // Update
  x = x + dx;
  y = y + dy;

  // edges

  if (x + r > width) {
    dx = dx * -1;
  }
  if (y + r > height) {
    dy = dy * -1;
  }
  if (x - r < 0) {
    dx = dx * -1;
  }
  if (y - r < 0) {
    dy = dy * -1;
  }
```

```
// net
  stroke(255);
  for(let i=0;i<height;i+=5)  {
  if(i%2==0)
  {
    line(width/2,i,width/2,i+5);
  }
}

  // paddle
  rectMode(CENTER);
  var Py=constrain(mouseY,Psize/2,height-Psize/2);
    stroke(0,255,0);
  strokeWeight(5);
    rect(20,Py,20,Psize);


  // paddle1 colision&
    if (x-r-r < 25   && (y-r > Py - Psize/2) && (y<Py+Psize/2) ) {
    dx = dx * -1;
  }

  // ball reiniciate
  if(x-r<0) {
   reset();
  }

}

function reset(){
  x=width/2;
  y=height/2
  dx=2; dy=2;
   }
```