

KAYLA DEVILA
DES 427-01
Prof Hurwich
07 Oct 2024

Interactive Visual Item: p5.js Code Explained

<https://kdevila.github.io/Interactive-VisualItem/>

My Code

```
**variables**

light1 = 'white';
light2 = 'white';
light3 = 'white';
light4 = 'white';
light5 = 'white';
// created variables "light1", "light2", "light3", "light4" & "light5" and set their color to white

function setup() { **functionsetup**
  createCanvas(720, 400); //set canvas to width and height of 720px by 400px
}

function draw() { **functiondraw**
  background('rgb(255,255,185)'); //created a yellow-toned background color and set it to rgb values
  //start text//
  fill("black"); //black fill color for following text
  textSize(15); //set text size to 15
  text("Use your mouse to trigger the bottom switches and find the right sequence to win!", 100,370);
  // Used text function to create words on screen; set x-coordinate to 100 and y-coordinate to 370
  //light switches (bottom row)//
  fill("pink"); // set bottom row ellipses to pink color
  ellipse(150,300,50,50);
  ellipse(250,300,50,50);
  ellipse(350,300,50,50);
  ellipse(450,300,50,50);
  ellipse(550,300,50,50); //made ellipses with varying x coordinates, with same y-coordinates, width and height
  //lights (top row)//
  fill(light1);
  ellipse(150,100,50,50);
  fill(light2);
  ellipse(250,100,50,50);
  fill(light3);
  ellipse(350,100,50,50);
  fill(light4);
```

```

ellipse(450,100,50,50);
fill(light5);
ellipse(550,100,50,50);
    //for top ellipses, used the syntax fill(light#) to default color to white; set varying x coordinates with y-coordinate,
width, and height being the same

if (light1 == '#afdc93' && light2 == '#afdc93' && light3 == '#afdc93' && light4 == '#afdc93' && light5 == '#afdc93'){
fill("black");
textSize(50);
text("You Win!", 250,200);
    //made an if statement where if the user creates the right sequence (color all top ellipses green); then black text "You
Win1" will display. Text is set to size of 50 and placed at x,y coordinates of 250,200
}
}

function mousePressed() {          **functionmousePressed**
// User interaction
if (dist(mouseX, mouseY, 150, 300) < 50/2) {      // if statement where the distance between one's mouse position
(mouseX, mouseY) to the fixed point of x-y coordinates 150,300 is being computed; if the distance is less than half the
point (< 50/2), then radius of 25px (half of 50) will surround point
// switch 1
light1 = '#afdc93';
light4 = '#afdc93';          // when user presses switch 1, "light1" & "light4" will be green
}
if (dist(mouseX, mouseY, 250, 300) < 50/2) {      // mouse's position (mouseX, mouseY) is tracked between coordinates
250,300; if the distance is less than half the point (< 50/2), then radius of 25px (half of 50) will surround point

// switch 2
light3 = '#afdc93';
light4 = 'white';          // when user presses switch 2, "light3" will be green & "light4" is white
}
if (dist(mouseX, mouseY, 350, 300) < 50/2) {      // mouse's position (mouseX, mouseY) is tracked between coordinates
350,300; if the distance is less than half the point (< 50/2), then radius of 25px (half of 50) will surround point
// switch 3
light5 = '#afdc93';          // when user presses switch 3, "light5" will be green
}
if (dist(mouseX, mouseY, 450, 300) < 50/2) {      // mouse's position (mouseX, mouseY) is tracked between coordinates
450,300; if the distance is less than half the point (< 50/2), then radius of 25px (half of 50) will surround point
// switch 4
light2 = '#afdc93';
light1= 'white';          // when user presses switch 4, "light2" will be green & "light1" is white
}
if (dist(mouseX, mouseY, 550, 300) < 50/2) {      // mouse's position (mouseX, mouseY) is tracked between coordinates
550,300; if the distance is less than half the point (< 50/2), then radius of 25px (half of 50) will surround point

```

```
// switch 5
light1 = 'white';
light2 = 'white';
light3 = 'white';
light4 = 'white';
light5 = 'white';           // when user presses switch 5, all "light(x)" variables are reset to white
    }
}
```

Note: With the dist(), I used it to calculate the distance between a user's mouse and a fixed point (x,y coordinates) created. I recalled the DES427 class exercises we've done, where mouseX and mouseY were used and dist() was tracked between. I also remembered doing so in past DES327 grouping exercises as well. I didn't jot down the class examples either time, so I used the references page of p5.js to see how to effectively use dist() for my project, and recalled its use from there!