

Art & Code - FWCD

Interactive Zoog

Objective

Practice using `setup()` and `draw()` with `mouseX`, `mouseY`, `pmouseX`, `pmouseY`.

Instructions

1. Copy and paste the code below into a sketch named InteractiveZoog

```
size(500, 500);
background(255);
ellipseMode(CENTER);
rectMode(CENTER);

//Body
stroke(0);
fill(150);
rect(240, 145, 20, 100);

//Head
fill(255);
ellipse(240, 115, 60, 60);

//Eyes
fill(0);
ellipse(221, 115, 16, 32);
ellipse(259, 115, 16, 32);

//Legs
stroke(0);
line(230, 195, 220, 205);
line(250, 195, 260, 205);
```

2. Add your name as a comment in the top of the lab. (This goes without saying from here.)
3. Modify the program to use `setup()` and `draw()`. What should happen just once? What should happen over and over? Rearrange the code accordingly.
4. Modify the program to draw Zoog wherever the mouse is.
Hint: Notice the Body is drawn at position (240, 145) and the Head is drawn at (240, 115). The difference is in the y coordinate. The body would be (mouseX, mouseY) but the head would be (mouseX, mouseY - 30). Using the Body coordinates as your reference, apply the changes to all parts of the drawing.
5. Modify the program so Zoog's legs are longer and move around while you move Zoog around.
`line(pmouseX, pmouseY, mouseX, mouseY);` //draws a line from the previous mouse position to current

