P5 Unit 1 Lesson 3 - Creating Additional Shapes

Patti, Jerusha Saranii

Vocabulary

Function
parameter
argument
canvas
JavaScript
Pixels
Debug
Vertex

Do Now:

Think/ Write/ Pair/ Share: What part of the P5 editor creates error messages?
How do they help you find errors.? What does it mean to debug your program?

Mini Lesson:How do we create other types of shapes on the P5 Inerface?

Lets review the coding for rectangles and ellipses and the punctuation needed.
(open parenthesis and
Closed parenthesis)
{ open curly brace and
Closed curly brace}
Also a semi colon;
And a forward slash /
And a comma,

To start with we like to use comments to describe what we are about to create and we can also use the comment to help use remember the syntax needed for the code for the particular shape or function we are creating. We write this with two forward slashes..// like this
//This is a comment. The P5 editor does not read it. It ignores it and goes to the code.
Here are some tips to help you with your program.

Mini Lesson: Cont'd

Use auto save, comment your code, debug, duplicate your file, take a break, get a second look from a collaborator!
Lets review the ellipse, rectangle and add the square and the circle

ellipse(x, y, width, height)
rect(x, y, width, height)
square(x, y, width)
circle(x, y, width)

Use the graph to draw your shapes if that helps before you plot them on the P5 editor. Try making one of each shape on the same program. Remember that you have to save your work and rename it. Call it My Second Shapes Project. If you finish early you can try layering your shapes in the following task.

Lets try some other shapes: using beginShape()
vertex(x, y)
endShape(CLOSE)

Other shapes - beginShape method

beginShape();

vertex(30, 20);

vertex(85, 20);

vertex(85, 75);

vertex(30, 75);

endShape(CLOSE);

Points

beginShape(POINTS);

vertex(30, 20);

vertex(85, 20);

vertex(85, 75);

vertex(30, 75);

endShape();

Lines

beginShape(LINES);

vertex(30, 20);

vertex(85, 20);

vertex(85, 75);

vertex(30, 75);

endShape();

noFill()

noFill();

beginShape();

vertex(30, 20);

vertex(85, 20);

vertex(85, 75);

vertex(30, 75);

endShape();

```
noFill();

beginShape();

vertex(30, 20);

vertex(85, 20);

vertex(85, 75);

vertex(30, 75);

endShape(CLOSE);
```

Triangles

beginShape(TRIANGLES);

vertex(30, 75);

vertex(40, 20);

vertex(50, 75);

vertex(60, 20);

vertex(70, 75);

vertex(80, 20);

endShape();

triangle_strip

beginShape(TRIANGLE_STRIP);

vertex(30, 75);

vertex(40, 20);

vertex(50, 75);

vertex(60, 20);

vertex(70, 75);

vertex(80, 20);

vertex(90, 75);

endShape();

triangle_fan

```
beginShape(TRIANGLE_FAN);

vertex(57.5, 50);

vertex(57.5, 15);

vertex(92, 50);

vertex(57.5, 85);

vertex(22, 50);

vertex(57.5, 15);

endShape();
```

quads

beginShape(QUADS);

vertex(30, 20);

vertex(30, 75);

vertex(50, 75);

vertex(50, 20);

vertex(65, 20);

vertex(65, 75);

vertex(85, 75);

vertex(85, 20);

endShape();

```
beginShape(QUAD_STRIP);
vertex(30, 20);
vertex(30, 75);
vertex(50, 20);
vertex(50, 75);
vertex(65, 20);
vertex(65, 75);
vertex(85, 20);
vertex(85, 75);
endShape();
```

```
beginShape(TESS);

vertex(20, 20);

vertex(80, 20);

vertex(80, 40);

vertex(40, 40);

vertex(40, 60);

vertex(80, 60);

vertex(80, 80);

vertex(20, 80);

endShape(CLOSE);
```

Work Period:

Task: Open up a P5 Editor and use at least four of the beginShape methods introduced in the Slide Deck. Use fill to fill in the shapes with colors and use stroke to give your shapes borders.

Closing: Exit Ticket

What did you learn in this lesson?

What did you find easy about this lesson?

What do you think you need more help with?