Interactive Drawing - 100B3

Drawing

The drawing must be ~~one~~ interactive, meaning "things" have to happen when the player touches the drawing. I have ~~two~~ an ideas to propose for this assignment.

Memory Mismatch

- ~~A lot like Simon Says, where the goal of the game is to click the correct colours in the right order.~~
- Four shapes - Circle, Square, Triangle, Hexagon.
  - Circle is Green
  - Square is Purple
  - Triangle is Red
  - Hexagon is Blue
- Order will be "randomized" and will go for six rounds (note: order is not randomized, rather in a set order that makes it feel like it is random).
- If the player wins, then the game goes "golden" (to be discovered later if the idea is good).
- If the player loses, the game ends and the player has to restart the game.

USE THIS FOR A SCALED DOWN VERSION OF THIS PROJECT!

1st Change

- Four shapes placed in the centers of the grid. A circle, a square, a triangle, and a hexagon.
- ~~When clicked~~ When a shape is clicked, ~~it will~~ all of the shapes will change into a different colour:
  - If circle is clicked, the circle will change from green to pink; the square will change from purple to orange; the triangle will change from red to white; and the hexagon will change from blue to yellow.
  - If square is clicked, the square will change from purple to cyan; the circle will change from green to orange; the triangle will change from red to lavender; and the hexagon will change from blue to black.
  - If triangle is clicked, the triangle will change from red to brown; the circle will change from green to yellow; the square will change from purple to indigo; and the hexagon will change from blue to magenta.
  - If hexagon is clicked, the hexagon will change from blue to pastel orange; the circle will change from green to pastel green; the square will change from purple to pastel yellow; and the triangle will change from red to pastel purple.

2nd change

The player will not have to click on a shape to change the colours of all of the other shapes. Instead, the player will need to click the screen to change the shape colours.

~~Here~~ Below are the colour patterns:

LEGEND - Circle • Square • Triangle • Hexagon

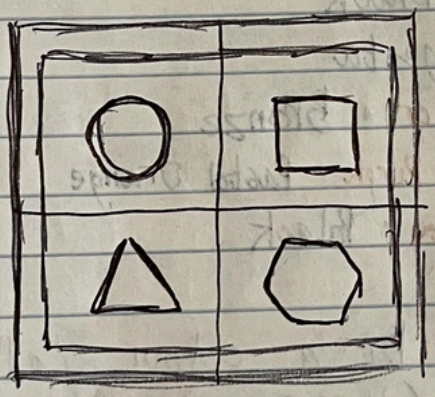
Pattern 1 - Green • Purple • Red • Blue
Pattern 2 - Pink • Orange • White • Yellow
Pattern 3 - Orange • Cyan • Lavender • Black
Pattern 4 - Yellow • Indigo • Brown • Magenta
Pattern 5 - Platinum • ~~Silver~~ Gold • Silver • Bronze
Pattern 6 - Pastel Green • Pastel Yellow • Pastel Purple • Pastel Orange
Pattern 7 - White • Light Grey • Dark Grey • Black

The background (sky) colour will be a colour called "true grey" ~~(a mix between white~~ (#818589). (129, 133, 137)

~~Patterns~~

- ~~#eff00~~ ~~(31, 255, 0) / (143, 0, 255) / (255, 0, 0) / (0, 55, 255)~~
- ~~(255, 0, 195) / (255, 153, 0) / (255, 255, 255) / (255, 239, 0)~~
- ~~(255, 153, 0) / (0, 255, 246) / (212, 150, 255) / (0, 0, 0)~~
- ~~(255, 239, 0) / (88, 88, 255) / (118, 62, 5) / (207, 0, 255)~~
- ~~(0, 255, 204) / (255, 213, 0) / (224, 224, 224) / (178, 109, 18)~~
- ~~(47, 255, 156) / (255, 255, 134) / (202, 134, 255) / (255, 216, 134)~~
- ~~(0, 0, 0) / (190, 190, 190)~~
- ~~(255, 255, 255) / (190, 190, 190) / (75, 75, 75) / (0, 0, 0)~~

The Box



~~Coords.~~ ~~Dimensions~~

~~Circle (50, 50)~~ ~~(50 x 50)~~

~~W (25, 50)~~

H (75, 50)

~~Square~~ (50 x 50)

(150, 50) W (125, 50)

H (

Coords.	Dimensions
○ R (50, 50) ~~X2~~	W 50 x 50 X2
W (25, 50) X2	H 50 x 50 X2
(75, 50) X2	
H (50, 25) X2	
(50, 75) X2	
□ R (150, 50) X2	W 50 x 50 X2
~~W~~ H (125, 25) X2	H 50 x 50 X2
P2 (125, 75) X2	
P3 (175, 25) X2	
P4 (175, 75) X2	

Coords.	Dimensions
△ X2 R (50, 150)	W 50 x 50
P1 (50, 125)	H 50 x 50
P2 (25, 175)	
P3 (75, 175)	
○ X2 R (150, 150)	W 50 x 50
P1 (140, 125)	H 50 x 50
P2 (160, 175)	
P3 (125, 150)	
P4 (175, 150)	
P5 (140, 175)	
P6 (160, 175)	

Update 1

I removed the colour patterns as I discovered that a random input exists.

~~Below is the code that I have written down as of October 8th, 2024 at 5:53pm.~~

~~public class Game~~
~~{~~
~~Color~~

I have added the four random variables for the shapes and colours, using the code:

```
Color shape = Random.Color();
```

This code will allow the colours of the different shapes to be called for a random colour.

I have also added a window title and size in the setup category (chain):

```
public void Setup()
{
  Window.SetTitle("truthful colours");
  Window.SetSize(400, 400);
}
```

The title is called "truthful colours" because it is the name of the application.

Along with the colour variables, I have also included the boolean variable of a mouse click:

```
bool mouseClick;
```

This allows for the mouse click function to ~~work correctly~~. to communicate with the input.

Next, I've added the input function of a mouse click:

```
mouseClick = Input.IsMouseButtonPressed(MouseInput.Left);
```

This is connected to the boolean mouse click variable so then the input of the left mouse button ~~is~~ works when pressed.

Then, I added the first shape drawing to the Update section:

```
Draw.FillColor = circle;
Draw.Circle(100, 100, 75);
```

This draws a circle that has a random colour assigned to it. The circle has a radius of 75 and is positioned at coordinates 100, 100.

Finally, I added the mouseclick and randomizer of the circle:

```
if (mouseClick == true)
{
  circle = Random.Color();
}
```

When the player clicks on the screen with a left mouse click, the colour of the circle changes randomly.

Update 2

As of 10/09/24 at 2:55pm EDT, I have gotten half of the programming done. The other stuff will be figured out later today.

I added the same stuff from the previous coding that I did for the other stuff. I will go over the extra stuff that was not covered yet.

For a triangle, I wrote this code:

```
Draw.Triangle(100, 250, 225, 375, 175, 375);
```

And for a hexagon, I wrote this:

```
Draw.Quad(225, 310, 265, 250, 335, 250, 375, 310);
```

For top half of the hexagon.

```
Draw.Quad(225, 310, 265, 375, 335, 375, 375, 310);
```

For bottom half of the hexagon.

Update 3

I have made more changes as of 10/09/24 at 4:52pm EDT.

I have added more colour codes for the boxes that separate the shapes from each other.

I have also added a line colour code in all of the shapes to give them depth:

```
Draw.LineColor = Color.Black;
```

I also added the following code to act as separaters for the shapes:

```
Draw.FillColor = box;
Draw.LineColor = box;
Draw.Rectangle(0, 0, 400, 20);
Draw.Rectangle(0, 0, 20, 400);
Draw.Rectangle(0, 380, 400, 20);
Draw.Rectangle(380, 0, 20, 400);
Draw.Rectangle(190, 0, 20, 400);
Draw.Rectangle(0, 190, 400, 20);
```

I also had to adjust the coordinates of all the shapes because they were not centred.

Update 4

This is going to be the last update of this project. I have attempted to make a couple of changes as of 10/10/24 at 11:47am.

The biggest change that I attempted to do was add an array and loop, but it did not seem to fit in well with the rest of the project. Not without removing the random function. Unless...

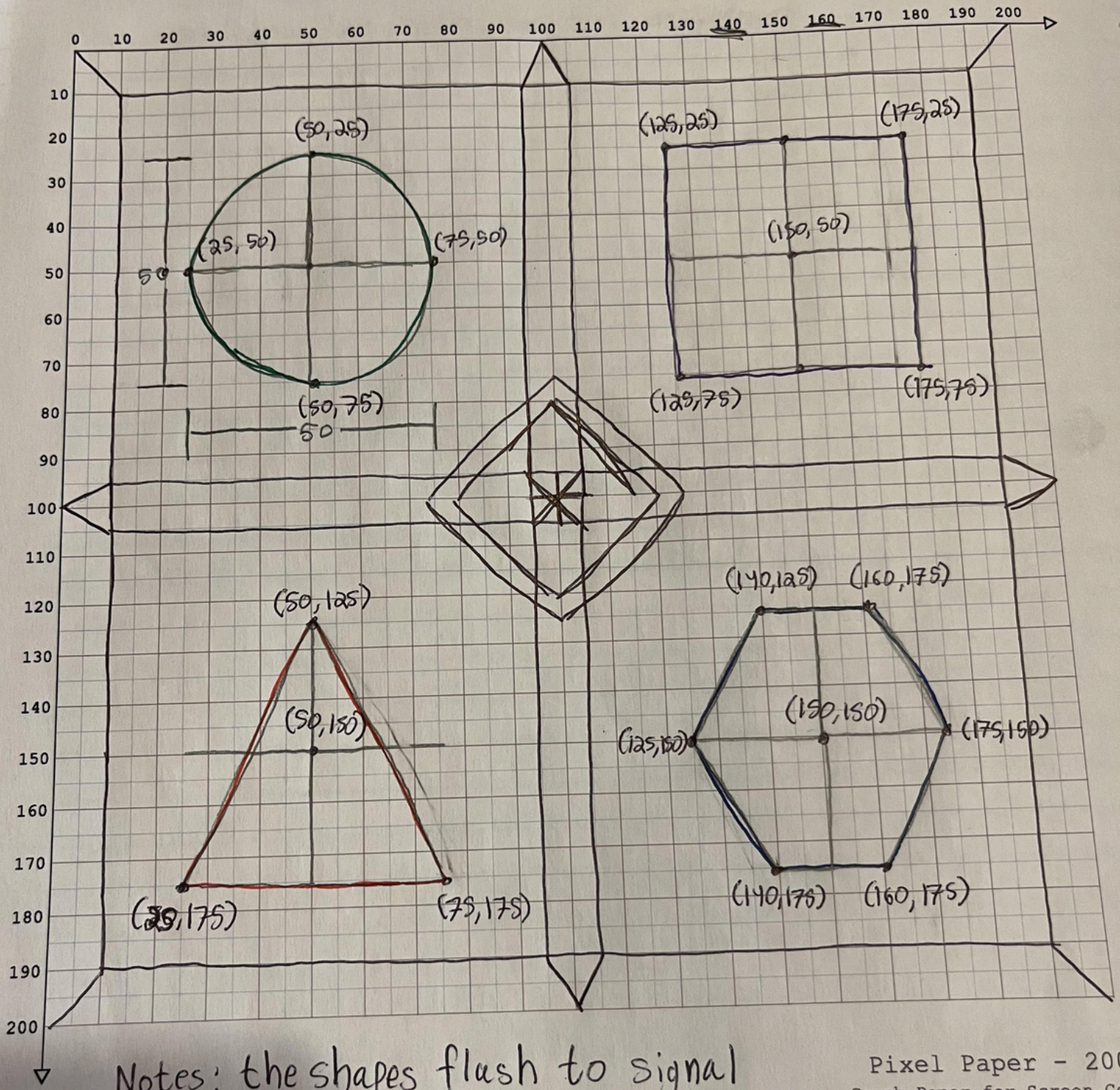
I've decided to add an array that changes the colours of the box separators from black to dark gray to gray to white.

```
Color [] boxz = [Color. Black, Color. DarkGray, Color. Gray, Color. White
int boxNum = 0;
```

```
if (mouseClick==true)
{
  boxNum++;
  box = boxz [boxNum];
  if (boxNum == 3)
  {
    boxNum = 0;
  }
}
```

After some trial and error, I've fixed the issue.
This concludes the notes for this assignment.

sketch



Notes: the shapes flash to signal what needs to be pressed