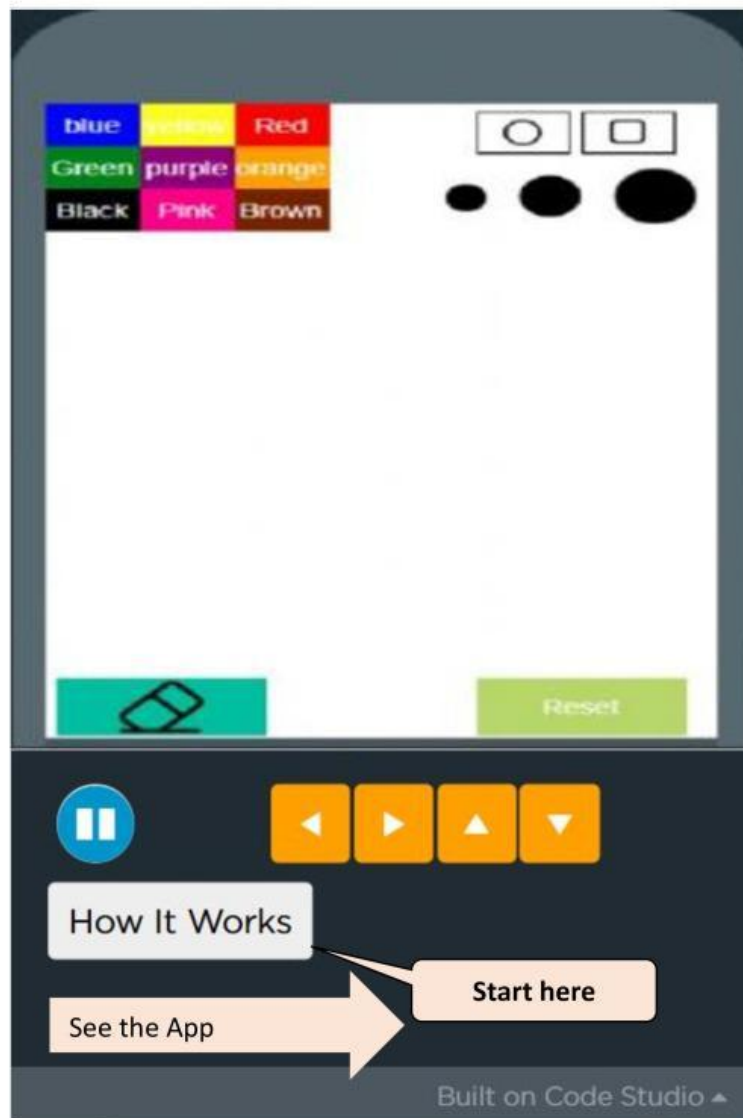


Project 59

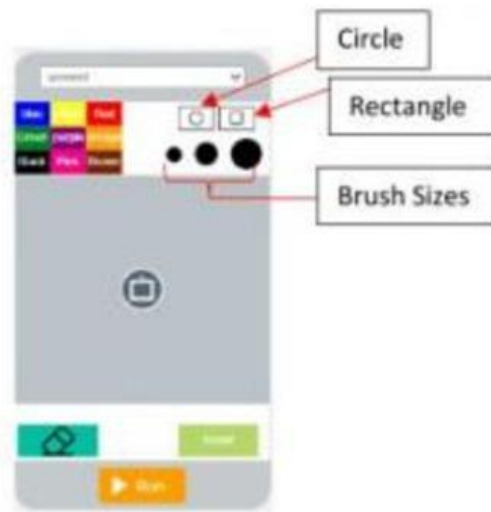


Coding School



Let's create a painting app.

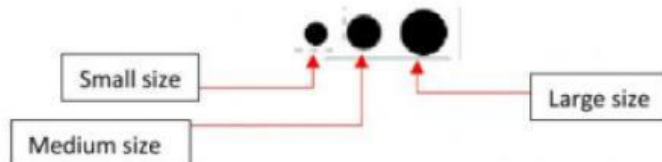
Everything required for this project has been provided to you. Just like the painting app you created earlier, let's create this app by adding more tools to it.



- ❖ Select the circle tool and create a circle by selecting a brush size.
- ❖ In the same way, by selecting the rectangle tool and selecting a brush size, let's create a box to paint.
- ❖ It is also necessary to make it possible to select the color of the paint according to the color selected from the color palette.

Now that you have the design, let's start coding.

- ❖ Create a variable as “brushSize” and set it equal to 0 to hold the selected brush size.
- ❖ Use this code `setActiveCanvas(▼"canvas1");` to activate to paint the canvas whose id is "canvas1" created in the design
- ❖ Then let's see how to select a brush size.



- ❖ When the Small button is selected, set the value of the brush size variable to 1 as follows.

```
onEvent(▼"Button_smallbrush", ▼"click", function() {
  brushSize = 1;
});
```

- ❖ When the Medium button is selected, set the value of the brush size variable to 2 as follows.

```
onEvent(▼"Button_mediumbrush", ▼"click", function() {
  brushSize = 2;
});
```

- ❖ When the Large button is selected, set the value of the brush size variable to 3 as follows.

```
onEvent(▼"Button_largebrush", ▼"click", function() {
  brushSize = 3;
});
```

- ❖ After selecting the brush size, let's code what should happen when a painting tool is selected.

First, let's code the section related to selecting the rectangle tool.

When the rectangle button is clicked, an onEvent block should be created to paint in the mousemove event. Let's set the size of the box that will be painted according to the brush size.

The image shows a Scratch code block for the rectangle tool. It starts with an 'onEvent' block for 'Button_rectangle' with a 'click' event, containing a 'function' block. Inside this function is another 'onEvent' block for 'canvas1' with a 'mousemove' event, also containing a 'function' block. This inner function has three 'if' statements based on the 'brushSize' variable:

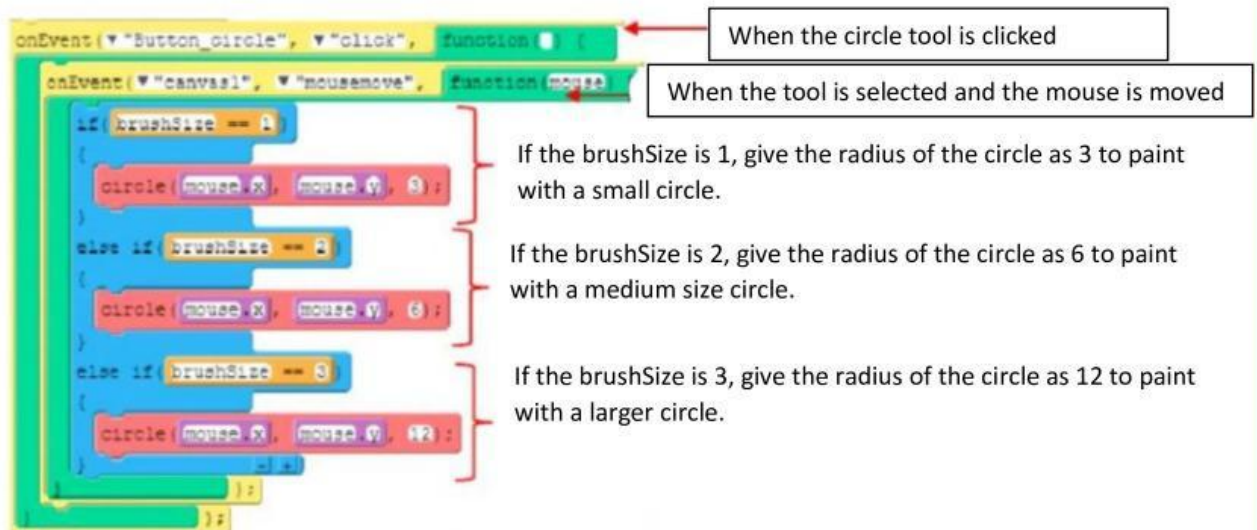
- If 'brushSize == 1', it calls 'rect(mouse.x, mouse.y, 3, 3)'.
- Else if 'brushSize == 2', it calls 'rect(mouse.x, mouse.y, 5, 5)'.
- Else if 'brushSize == 3', it calls 'rect(mouse.x, mouse.y, 15, 15)'.

 Annotations with arrows point to the 'onEvent' blocks and the 'rect' calls. A box labeled 'When the Rectangle tool is clicked' points to the outer 'onEvent' block. A box labeled 'When the tool is selected and the mouse is moved' points to the inner 'onEvent' block. Brackets on the right side of the 'if' statements link them to descriptive text:

- For brushSize 1: 'If the brushSize is 1, give the rectangle width, height 3, 3 to paint with a small rectangle.'
- For brushSize 2: 'If the brushSize is 2, give the rectangle width, height 5, 5 to paint with a medium sized rectangle.'
- For brushSize 3: 'If the brushSize is 3, give the width, height of the rectangle as 15, 15 to paint with a large rectangle.'

 A note at the bottom states: '❖ You can change the width and height of the rectangle in each brushSize.'

- ❖ Now let's code what should happen when the circle tool is selected. When you click on the button related to the circle tool, let's create a code to paint in the shape of a circle when the mouse moves as above.



- ❖ Let's create what happens when you click on the colored button to select the color you want to paint.

```

onEvent(▼ "Button_blue", ▼ "click", function() {
  setStrokeColor(▼ "blue");
  setFillColor(▼ "blue");
});
  
```

All the buttons in the design are named as above. When you click on one of them, let's create the stroke colour and fill colour related to that colour like the above code.

```

onEvent(▼ "Button_yellow", ▼ "click", function() {
  setStrokeColor(▼ "yellow");
  setFillColor(▼ "yellow");
});

onEvent(▼ "Button_red", ▼ "click", function() {
  setStrokeColor(▼ "red");
  setFillColor(▼ "red");
});
  
```