

Lesson plan – 5

Level 1

```
var rectangleWidth = 320;  
var rectangleHeight = 150;  
setSize(▼ "blueRectangle", rectangleWidth, rectangleHeight);  
setSize(▼ "pinkRectangle", rectangleWidth, rectangleHeight);  
setSize(▼ "greenRectangle", rectangleWidth, rectangleHeight);
```

Level 2

```
var color1 = "black";  
var color2 = "red";  
var blockWidth = 80;  
var blockHeight = 150;  
  
//Don't change anything below here!  
setProperty(▼ "block1", ▼ "background-color", ▼ color1);  
setProperty(▼ "block1", ▼ "width", ▼ blockWidth);  
setProperty(▼ "block1", ▼ "height", ▼ blockHeight);  
  
setProperty(▼ "block2", ▼ "background-color", ▼ color2);  
setProperty(▼ "block2", ▼ "width", ▼ blockWidth);  
setProperty(▼ "block2", ▼ "height", ▼ blockHeight);  
  
setProperty(▼ "block3", ▼ "background-color", ▼ color1);  
setProperty(▼ "block3", ▼ "width", ▼ blockWidth);  
setProperty(▼ "block3", ▼ "height", ▼ blockHeight);  
  
setProperty(▼ "block4", ▼ "background-color", ▼ color2);  
setProperty(▼ "block4", ▼ "width", ▼ blockWidth);  
setProperty(▼ "block4", ▼ "height", ▼ blockHeight);  
  
setProperty(▼ "block5", ▼ "background-color", ▼ color2);  
setProperty(▼ "block5", ▼ "width", ▼ blockWidth);  
setProperty(▼ "block5", ▼ "height", ▼ blockHeight);  
  
setProperty(▼ "block6", ▼ "background-color", ▼ color1);  
setProperty(▼ "block6", ▼ "width", ▼ blockWidth);  
setProperty(▼ "block6", ▼ "height", ▼ blockHeight);
```

```

setProperty(▼ "block7", ▼ "background-color", ▼ color2);
setProperty(▼ "block7", ▼ "width", ▼ blockWidth);
setProperty(▼ "block7", ▼ "height", ▼ blockHeight);

setProperty(▼ "block8", ▼ "background-color", ▼ color1);
setProperty(▼ "block8", ▼ "width", ▼ blockWidth);
setProperty(▼ "block8", ▼ "height", ▼ blockHeight);

setProperty(▼ "block9", ▼ "background-color", ▼ color1);
setProperty(▼ "block9", ▼ "width", ▼ blockWidth);
setProperty(▼ "block9", ▼ "height", ▼ blockHeight);

setProperty(▼ "block10", ▼ "background-color", ▼ color2);
setProperty(▼ "block10", ▼ "width", ▼ blockWidth);
setProperty(▼ "block10", ▼ "height", ▼ blockHeight);

setProperty(▼ "block11", ▼ "background-color", ▼ color1);
setProperty(▼ "block11", ▼ "width", ▼ blockWidth);
setProperty(▼ "block11", ▼ "height", ▼ blockHeight);

setProperty(▼ "block12", ▼ "background-color", ▼ color2);
setProperty(▼ "block12", ▼ "width", ▼ blockWidth);
setProperty(▼ "block12", ▼ "height", ▼ blockHeight);

```

Level 3

```

var myName = "Dhikshith D";

//Fix the bug in the code below!
setText(▼ "name1", myName);
setText(▼ "name2", myName);
setText(▼ "name3", myName);
setText(▼ "name4", myName);

```

Level 4

```

var x = 150;

//2) Update each setProperty block by typing your variable
setProperty(▼ "rectangle1", ▼ "x", ▼ x);
setProperty(▼ "rectangle2", ▼ "x", ▼ x);
setProperty(▼ "rectangle3", ▼ "x", ▼ x);
setProperty(▼ "rectangle4", ▼ "x", ▼ x);

```

Level 5

```
var value = 0;

onBoardEvent(▼buttonL, ▼"down", function() {
    value = value + 1;
    setText(▼"valueLabel", value);
});

onBoardEvent(▼buttonR, ▼"down", function() {
    //Add your code here!
    value = value - 1;
    setText(▼"valueLabel", value);
});
```

Activate Windows

Level 6

```
var yPosition = 170;

onBoardEvent(▼buttonR, ▼"down", function() {
    //1) Subtract one from the `yPosition` variable
    yPosition = yPosition + 1000;
    setProperty(▼"birdIcon", ▼"y", ▼yPosition);
});

onBoardEvent(▼buttonL, ▼"down", function() {
    //1) Subtract one from the `yPosition` variable
    yPosition = yPosition - 1000;
    setProperty(▼"birdIcon", ▼"y", ▼yPosition);
});
```

Level 7

```
var yPosition = 200;

onBoardEvent(▼buttonL, ▼"down", function() {
  yPosition = yPosition - 15;
  setProperty(▼"sunImg", ▼"y", ▼yPosition);
  if(yPosition < 315) {
    setProperty(▼"screen1", ▼"background-color", ▼"orange");
  }
});

onBoardEvent(▼buttonR, ▼"down", function() {
  yPosition = yPosition + 15;
  setProperty(▼"sunImg", ▼"y", ▼yPosition);
  if(yPosition > 315) {
    setProperty(▼"screen1", ▼"background-color", ▼"gray");
  }
});
```

Level 8

```
var textSize = 10;

onBoardEvent(▼buttonL, ▼"down", function() {
  textSize = textSize + 2;
  setProperty(▼"textLabel", ▼"font-size", ▼textSize);
  setText(▼"textLabel", "SURPRISE");
  buzzer.frequency(500, 100);
  //Add your code here!
});
```

Level 9

```
var xPositon = randomNumber(0, 300);
setProperty(▼"toastImg", ▼"x", ▼xPositon);

onBoardEvent(▼buttonL, ▼"down", function() {
  xPositon = xPositon - 5;
  setProperty(▼"toastImg", ▼"x", ▼xPositon);
  //1) If the toast is too far to the left, play a sound to al
  if (xPositon < 60) {
    buzzer.frequency(500, 100);
  }
});

onBoardEvent(▼buttonR, ▼"down", function() {
  xPositon = xPositon + 5;
  setProperty(▼"toastImg", ▼"x", ▼xPositon);
  //2) If the toast is too far to the right, play a sound to alert the user
  if (xPositon > 220) {
    buzzer.frequency(500, 100);
  }
});
```

Level 10

```
var size = 20;
onBoardEvent(▼buttonL, ▼"down", function() {
  //Add your variable update here
  size = size + 20;
  setProperty(▼"emojiImage", ▼"width", ▼size);
  setProperty(▼"emojiImage", ▼"height", ▼size);
  //Add your if-statement here
  if (size > 300) {
    buzzer.frequency(500, 500);
  }
});
```