

Sprite Objects

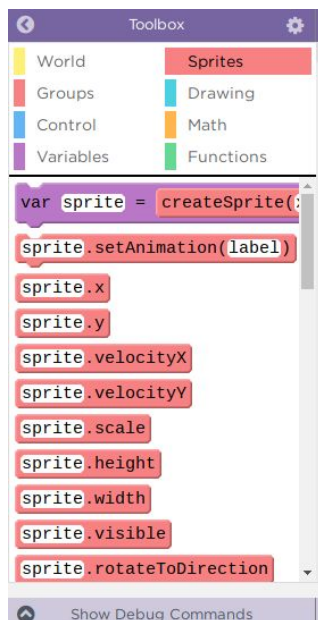


What we did:

- Create a sprite object
- Access predefined sprite properties and functions

How we did it:

Step 1: Locating the sprite tool

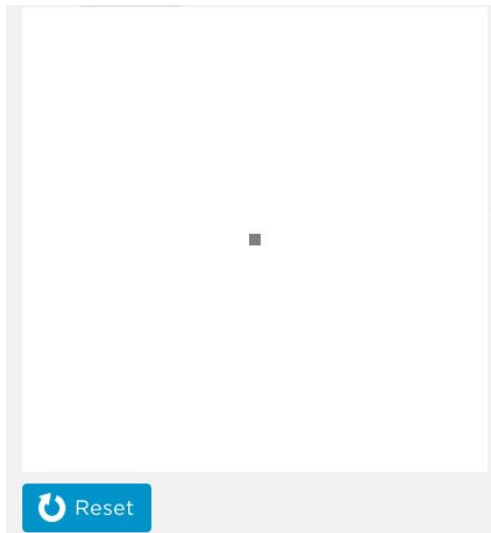


This is how the sprite code and output looks (Remember: Sprites are always rectangular, you can give them a shape later):

Code:

```
1 var ball = createSprite(200,200,10,10);
2 function draw() {
3   drawSprites();
4 }
```

Output



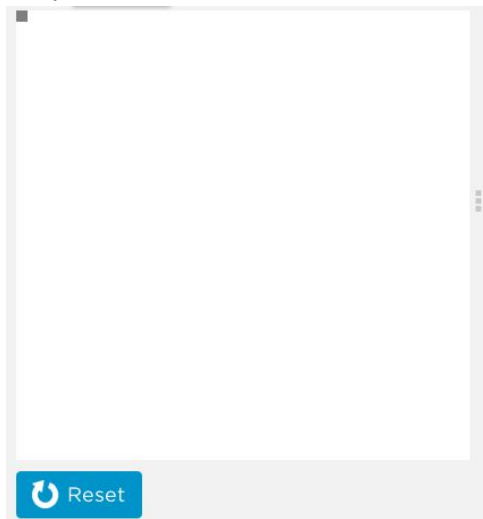
Step 2 : Renaming the Sprite to “ball” and giving it a position

Follow this code to create the ball.

Code:

```
1 var ball = createSprite(200,200,10,10);  
2 function draw() {  
3 }  
4
```

Output:



Step 3 : Animating the ball!

Check out the code for animating the sprite (In this case, we have redefined it as the ball!)

Code:

```
1 var ball = createSprite(200,200,10,10)
2
3 function draw() {
4   background("white");
5
6   ball.velocityX = 2;
7   ball.velocityY = 3;
8
9   createEdgeSprites();
10  ball.bounceOff(edges);
11
12  drawSprites();
13 }
14
```

Output:

The ball keeps moving to and fro near the boundary.

Now, to make the ball bounce off the walls, code this way:

Code:

```
1 var ball = createSprite(200,200,10,10);
2 ball.velocityX = 2;
3 ball.velocityY = 3;
4
5 function draw() {
6   background("white");
7   createEdgeSprites();
8   ball.bounceOff(edges);
9   drawSprites();
10 }
11
```

Output:

The ball bounces off the all the edges

Step 4 :

Making 4 balls bounce off each other! Follow this code:

Code:

```
ball1.bounce(ball2);  
ball1.bounce(ball3);  
ball1.bounce(ball4);
```

```
ball2.bounce(ball3);  
ball2.bounce(ball4);
```

```
ball3.bounce(ball4);
```

What's next?:

We're going to use the bouncing ball animation to create a more challenging game. Until then, practice the code!