

Platformer Code

Q. I want a platform. But I don't want one like the one on CSD Unit 3, Lesson 26 that goes down, I want one with a sideways scroll. How do I do that?

A. Don't. Gravity and platforms is a pain.

However, if you ignore me and do it anyway, be prepared to accept bugs in your code.

If the gravity and the scroll aren't the same way, it is a pain... so it won't be perfect.

The video that explains all of this is here: <https://youtu.be/c9HfPloog9k>

```
1  var speed = -1;
2  //Space Background - 2 frames to scroll
3  var frame1 = createSprite(200, 200);
4  frame1.setAnimation(▼"sci-fi_1");
5  frame1.velocityX = speed;
6
7  var frame2 = createSprite(600, 200);
8  frame2.setAnimation(▼"sci-fi_1");
9  frame2.velocityX = speed;
10
11 //Main character
12 var jumper = createSprite(100, 300);
13 jumper.setAnimation(▼"alienGreen_walk_1");
14
```

```
15 //Platform
16 var platform = createSprite(400, 210);
17 platform.setAnimation(▼"ground_wood_1");
18 platform.velocityX = speed;
19
20 var platformTop = createSprite(400, 205);
21 platformTop.setAnimation(▼"edge");
22 platformTop.velocityX = speed;
23
24 var platformBottom = createSprite(400, 220);
25 platformBottom.setAnimation(▼"edge_copy_1");
26 platformBottom.velocityX = speed;
27
28 var onPlatform = "no";
29
```

```
30 //Enemy
31 var enemy = createSprite(400, 300);
32 enemy.setAnimation(▼"sun_1");
33 enemy.scale = 0.25;
34 enemy.velocityX = speed;
35
36 //Score variable
37 var score = 0;
38
```

```
39 function draw() {
40   drawSprites();
41
42   //Handle background scrolling movement
43   //Alternate what is on the screen
44   if ( frame1.x < -200 ) {
45     frame1.x = 600;
46   }
47   if ( frame2.x < -200 ) {
48     frame2.x = 600;
49   }
50 }
```

```
51 //hit the ground
52 if ( jumper.y > 300 ) {
53   jumper.velocityY = 0;
54   jumper.setAnimation(▼"alienGreen_walk_1");
55 }
56
57 //jump
58 if ( keyWentDown(▼"space") ) {
59   jumper.velocityY = jumper.velocityY - 3;
60   jumper.setAnimation(▼"alienGreen_jump_1");
61 }
62
63 //gravity pulls down
64 if ( jumper.y < 125 ) {
65   jumper.velocityY = 3;
66   jumper.setAnimation(▼"alienGreen_duck_1");
67 }
68
```

```
69 //Platform -----
70 //Slide along on top of platform
71 if ( jumper.isTouching (platformTop) ) {
72     jumper.velocityY=0;
73     onPlatform="yes";
74 }
75
76 //Platform passes under us, then go down
77 if ( ! jumper.isTouching (platformTop) && jumper.y < 300 && onPlatform=="yes" ) {
78     jumper.velocityY = 3;
79     jumper.setAnimation (▼ "alienGreen_duck_1");
80     onPlatform="no";
81 }
82
```

```
83 //Bounce off platform bottom
84 if ( jumper.isTouching (platformBottom) ) {
85     jumper.velocityY = 3;
86     jumper.setAnimation (▼ "alienGreen_duck_1");
87 }
88
```

```
89 //enemy hits alien -----
90 //score: decreases, respawn enemy farther over
91 if ( jumper.isTouching (enemy) ) {
92     enemy.x = randomNumber (510, 530);
93     score--;
94 }
95
96 //enemy gets to edge
97 //score: increase, respawn enemy
98 if ( enemy.x < -50 ) {
99     enemy.x = randomNumber (410, 430);
100     score++;
101 }
102
```

```
103 //respawn platform
104 if( platform.x <-50){
105     platform.x =400;
106     platformTop.x =400;
107     platformBottom.x =400;
108 }
109
```

```
111 //display score
112 textSize(20);
113 text("Score: "+score, 10, 20);
114
```