

Game Lab – Falling Stars

This game is a variation of Pong. In this game, you fly around to collect stars. If you miss any, you lose a point.

Create these animations:



Add the sprites to the screen.

The background doesn't move at all. Make it first so it is drawn first in the draw loop and erases the other items.

```
var back = createSprite(200, 200);
back.setAnimation("city_1");
```

The paddle will move from side to side, but only when the button is pressed. Make it second.

```
var bot = createSprite(100, 300);
bot.setAnimation("fly_bot_1");
bot.scale = 0.60;
```

The star will go last. It is going to bounce around the screen and it is going to move by itself, so add velocity.

```
var star = createSprite(300, 10);
star.setAnimation("coin_gold_1");
star.velocityY = 6;
star.scale = 0.5;

var points = 0;
```

In the draw loop, start by moving your bot right and left when the user types a or d.

```
function draw() {  
    drawSprites();  
    if (keyDown("a") && (bot.x >= 10)) {  
        bot.x -= 10;  
    }  
    if (keyDown("d") && (bot.x <= 380)) {  
        bot.x += 10;  
    }  
}
```

Run your code and test it to see that the bot is moving correctly.

Now, let's make the paddle move.

Inside the draw loop, at the bottom, add the code to add to the points if the star touches the bot.

```
if(star.isTouching(bot)){  
    star.y = 0;  
    star.x = random(10, 380);  
    points++;  
}  
text("Stars: "+points, 10, 10);
```

Run your code and test it to see if you can catch a star.

Now, let's make you lose a point if the star gets to the bottom. We also need to make the star respawn to the top. Add this code before the text block.

```
if(star.y > 400){  
    star.y = 0;  
    star.x = random(10, 380);  
    points--;  
}
```

Add another falling star.

```
var star2 = createSprite(200, -200);
```

We started it with a y value of -200 so that it starts off the screen. This will give it a bit of a delay before it moves to the screen.

You will need to add code to the draw loop for the second star too so that the bot can catch it too.