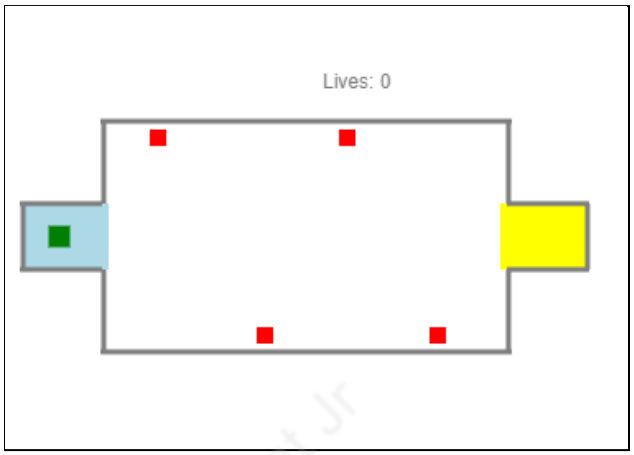
THE WORLD'S HARDEST GAME



What is our GOAL for this MODULE?

We used our knowledge of sprites, functions, loops, and sound to create a game.

What did we ACHIEVE in the class TODAY?

- Created "The World's Hardest Game".
- Reviewed concepts covered in the previous lessons.

Which CONCEPTS/ CODING BLOCKS did we cover today?

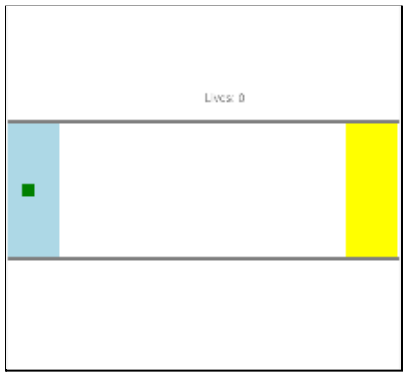
- createSprite()
- if conditionals {}
- velocityY property
- KeyDown() function
- bounceOff() function
- isTouching() function

How did we DO the activities?

STEP 1: Create boundaries around a road and place Sam in the starting box..

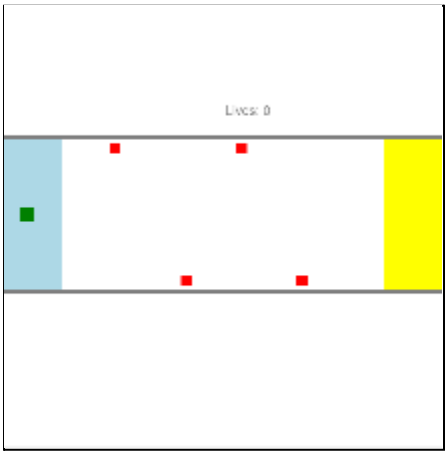
```
boundary1 = createSprite(190,120,420,3);
boundary2 = createSprite(190,260,420,3);

sam = createSprite(20,190,13,13);
sam.shapeColor = "green";
```



STEP 2: Create four obstacles(cars).

```
car1 = createSprite(100,130,10,10);
car1.shapeColor = "red";
car2 = createSprite(215,130,10,10);
car2.shapeColor = "red";
car3 = createSprite(165,250,10,10);
car3.shapeColor = "red";
car4 = createSprite(270,250,10,10);
car4.shapeColor = "red";
```



STEP 3: Give positive or negative Y velocity to cars depending upon in which direction you want them to move.

```
car1.velocityY = 8;
car2.velocityY = 8;
car3.velocityY = -8;
car4.velocityY = -8;
```

STEP 4: Make the cars bounce off the boundary sprites so that they remain between the two boundary sprites.

```
car1.bounceOff(boundary1);
car1.bounceOff(boundary2);
car2.bounceOff(boundary1);
car2.bounceOff(boundary2);
car3.bounceOff(boundary1);
car3.bounceOff(boundary2);
car4.bounceOff(boundary1);
car4.bounceOff(boundary2);
```

STEP 5: Use the conditional programming to move Sam on the press of right/left arrow keys.

```
if(keyDown("right")){
  sam.x = sam.x + 2;
}
if(keyDown("left")){
  sam.x = sam.x - 2;
}
```

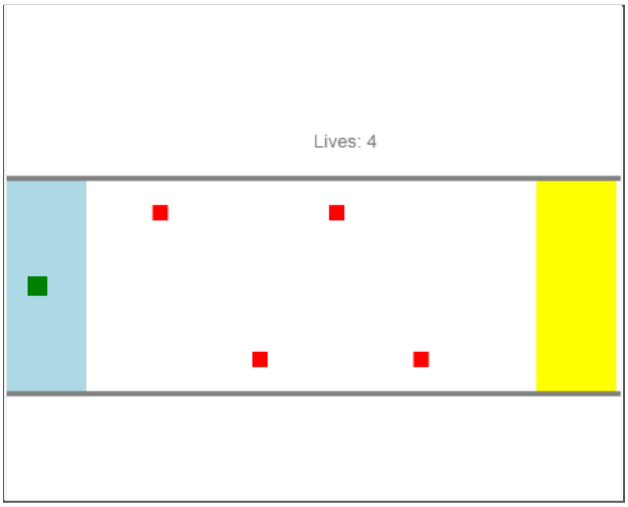
STEP 6: Make Sam reset back to his starting position whenever he touches a car.

```
if(
   sam.isTouching(car1)||
   sam.isTouching(car2)||
   sam.isTouching(car3)||
   sam.isTouching(car4))
{
   sam.x = 20;
   sam.y = 190;

}
```

STEP 7: Increment the life variable by one each time Sam is reset to its original position.

```
if(
   sam.isTouching(car1)||
   sam.isTouching(car2)||
   sam.isTouching(car3)||
   sam.isTouching(car4))
{
   sam.x = 20;
   sam.y = 190;
   life = life + 1;
}
```



What's next?

We will start building the Trex game.

Extend Your Knowledge:

1. textFont()