TREX RUNNER

What is our GOAL for this MODULE?

Create a jumping and running Trex dinosaur for our Trex game

What did we ACHIEVE in the class TODAY?

- Made a jumping and running Trex
- Learned to scale the images in the game
- Create a ground sprite

Which CONCEPTS/ CODING BLOCKS did we cover today?

- Add animation to Sprites
- Add gravity effect to Sprites
- Create a **ground** sprite and **Trex** sprite

How did we DO the activities?

1. Create a sprite for Trex somewhere near the ground. Let's give a name to our sprite as Trex and store it in a variable.

```
var trex

function setup(){
  createCanvas(600,200)

  //create a trex sprite
  trex = createSprite(50,160,20,50);

}

function draw(){
  background("white")
  drawSprites();
}
```

2. Create a rectangular sprite called **ground**. This is where the Trex dinosaur will run. The **ground** sprite should ideally cover the entire screen:

```
function setup(){
  createCanvas(600,200)
  trex = createSprite(50,160,20,50);
  trex.addAnimation("running", trex_running);

  //adding scale and position to trex
  trex.scale = 0.5;
  trex.x = 50;

  //create ground Sprite
  ground = createSprite(200,180,400,20);

}
```

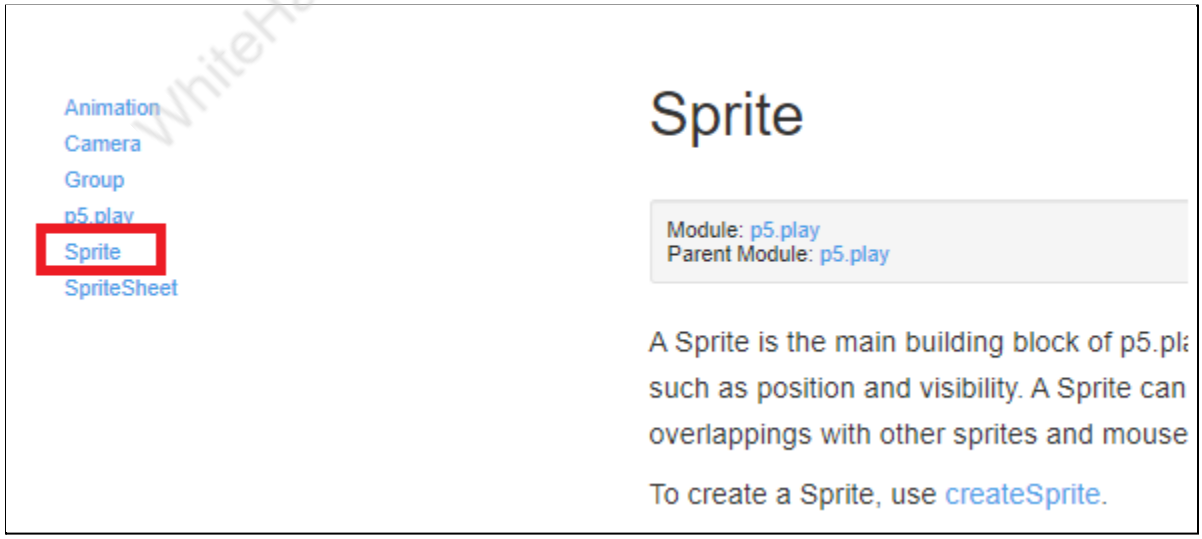
3. Create a Trex Sprite and load a running Trex animation:

```
var trex ,trex_running;

function preload()
{
  trex_running = loadAnimation("trex1.png", "trex
3.png", "trex4.png");

}

function setup(){
  createCanvas(600,200)

  //create a trex sprite
  trex = createSprite(50,160,20,50);
  trex.addAnimation("running", trex_running);
}

function draw(){
  background("white")
  drawSprites();

}
```

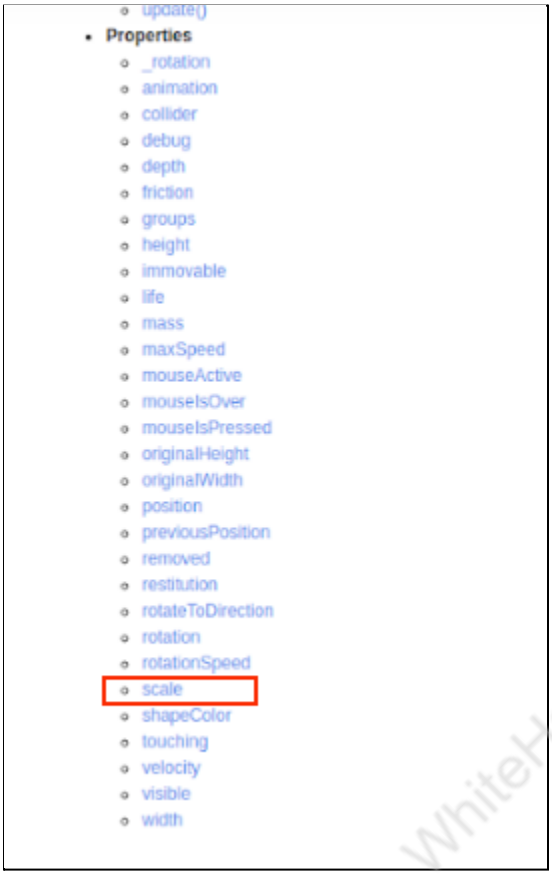
4. Make the Trex jump and add a gravity effect to it. Make sure the Trex falls on the ground:

```
function setup(){
  createCanvas(600,200)
  trex = createSprite(50,160,20,50);
  trex.addAnimation("running", trex_running);
  edges = createEdgeSprites();

}

function draw(){
  //set background color to white
  background("white");

  //jump when space key is pressed
  if(keyDown("space"))
  {
    trex.velocityY = -10;
  }
  trex.velocityY = trex.velocityY + 0.5;

  //stop trex from falling down
  trex.collide(edges[3]);
  drawSprites();
}
```

5. Click on the Sprite documentation:



6. Choose the scale properties:



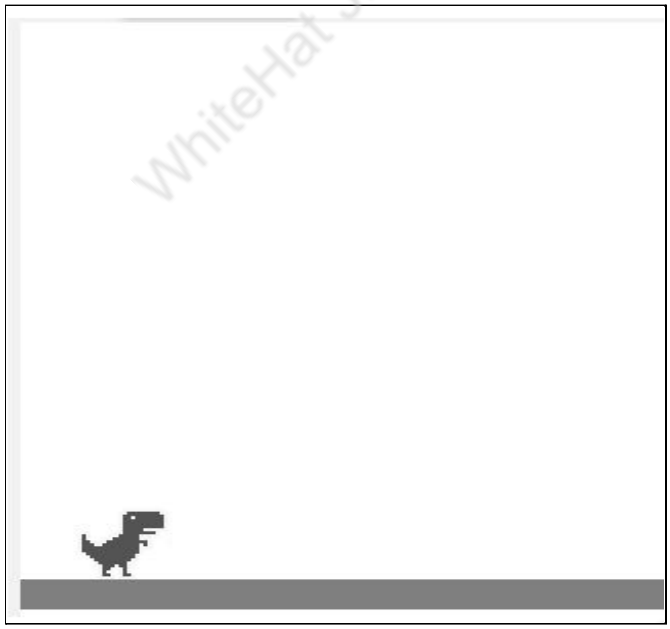
7. Scale the dinosaur to the right size:

```
function setup(){
  createCanvas(600,200)
  trex = createSprite(50,160,20,50);
  trex.addAnimation("running", trex_running);
  edges = createEdgeSprites();

  //adding scale and position to trex
  trex.scale = 0.5;
  trex.x = 50;
}

function draw(){
  //set background color to white
  background("white");
```

8. Collide the Trex to the ground:

```
  //create ground Sprite
  ground = createSprite(200,180,400,20);
}

function draw(){
  background(220);

  //jump when space key is pressed
  if(keyDown("space"))
  {
    trex.velocityY = -10;
  }
  trex.velocityY = trex.velocityY + 0.5;

  //stop trex from falling down
  trex.collide(ground);

  drawSprites();
}
```

Output:



What's next?

We will fix the two bugs discovered in the game and we learn to build the infinite running Trex.

Extend Your Knowledge:

To know more about adding an image you can use the link here: AddImage