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MONKEY GO HAPPY - 2

WhiteHat Jr
Live Online Coding for Kids

INSTRUCTIONS:

Goal of the Project:

In Class 18 you have learned how to use switch case to assign different actions based on different conditions. You also learned how to start a small local web server and host files locally to see the game.

In this project you have to apply and practice what you have learned in the class and complete building the Monkey Game.

** This is a continuation of Project 16, so make sure to complete that project before doing Project 18. **

Story:

A monkey has escaped from the zoo and is very hungry. Help the monkey collect Bananas by jumping over obstacles. You have already created the basic game in project 16.

Now you have to make the game interesting by adding a scoreboard, images and animations to the game. To make it even more exciting, increase the size of the monkey after eating bananas and decrease its size if it falls or hits an obstacle.

***This is just for your reference. We expect you to apply your own creativity in the project.**

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Getting Started:

1. Download the images and the **p5.play.js** library from this link.
2. Login to P5 online editor using Google Account or by using your credentials
3. Create a **New p5 project** on the p5 editor.
4. Rename the project to **Project 18** and Click on **"Save"** under the File menu.
5. Include the images and the p5.play.js file by uploading the files to your project.

Specific Task to complete the Project:

1. Create global variables for:
    - bananaImage
    - obstacleImage
    - obstacle group
    - background
    - score

2. Write **preload()** function to load animation of the player/monkey and background image. (See Hints)

3. In **setup()** function, create a sprite of **background**.
    - Add an image to the background.
    - Give it a velocity and start from the center of the image to reset it.

4. Set the **ground visibility** to **false**.

5. Add animation for the player.

6. In the **draw()** function:
    - Reset the background.
    - Write a condition - If **foodGroup** is touching the animal, increase the score by 2 and destroy food.
    - Write **switch case** to increase the size of animal after it reaches certain score like (10, 20, 30 and so on) (See Hints)
    - If the **obstacleGroup** is touching the animal, set the scale of the animal back to starting scale.
    - Display text for score after **drawSprites()** function. (See Hints)

7. Click on the **Play button** once to check if the code is working.

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Additional Activity:

1. If the animal hits an obstacle once, reduce the scale of the animal.
2. But if it touches an obstacle second time, end the game and introduce gameStates.

Submitting the Project:

1. **SAVE** all the changes made to the project.
2. Create a sharable link on the P5.js editor by clicking on **File** and then clicking on **Share** option.
3. Copy the link from the present tab and submit it in the Student Dashboard Projects panel against the correct class number.

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Hints:

1. Add animation for running Monkey as follows:

```
function preload(){
  backImage=loadImage("jungle.jpg");
  player_running =
loadAnimation("Monkey_01.png","Monkey_02.png","Monkey_03.png","Monkey_04.png"
,"Monkey_05.png","Monkey_06.png","Monkey_07.png","Monkey_08.png","Monkey_09.p
ng","Monkey_10.png");



  bananaImage = loadImage("Banana.png");
  obstacle_img = loadImage("stone.png");

}
```

2. Example of switch case for increasing Monkey size:

```
switch(score){
    case 10: player.scale=0.12;
             break;
    case 20: player.scale=0.14;
             break;
    case 30: player.scale=0.16;
             break;
    case 40: player.scale=0.18;
             break;
    default: break;
}
```

3. Use the following code to give a condition for resetting the scale of an animal after it touches an obstacle.

```
if(obstaclesGroup.isTouching(player)){
    player.scale=0.2;
}
```

4. Use the following code to display the score on the background.

```
stroke("white");
textSize(20);
fill("white");
text("Score: "+ score, 500,50);
```

REMEMBER... Try your best, that's more important than being correct.
After submitting your project your teacher will send you feedback on your work.

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