

INSTRUCTIONS:

Goal of the Project:

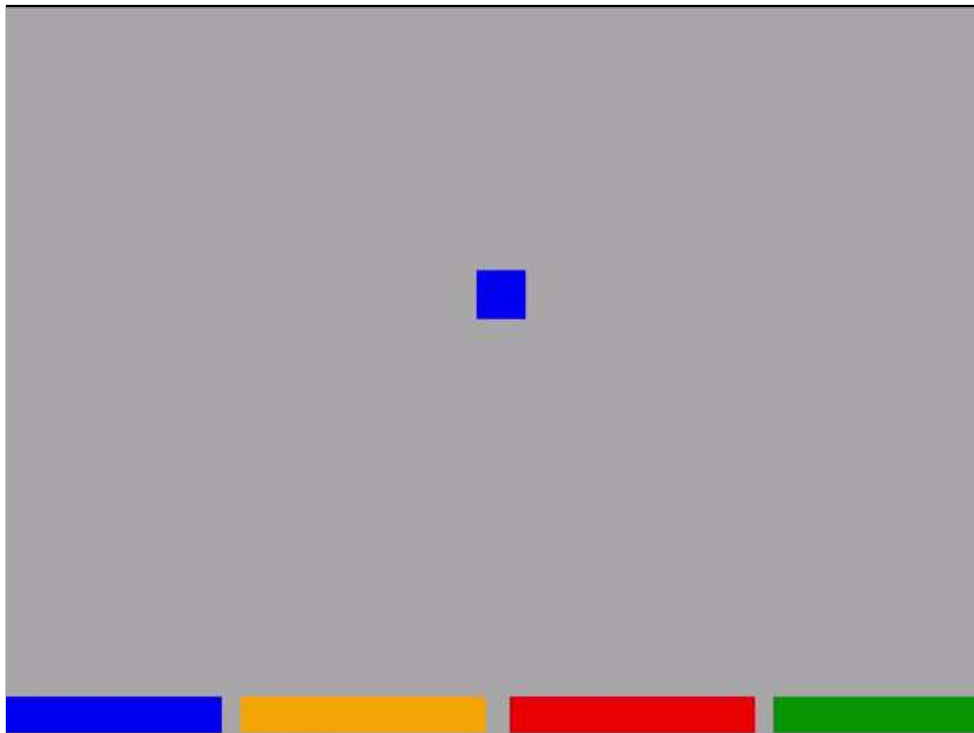
In class 21, you learned how to extend the feature of collisions and created your own library, allowing you to try collisions with more than one object.

In this project, you will apply what you have learned in the class to create 4 collision surfaces and a moving box. Also, you have to add sound and stop box conditions.

Story:

John and Jacky are two brothers who are planning to create a game. They are creating a game in which the box will start moving with a specific velocity, and its color gets changed according to its colliding surfaces' color.

See a video of this in [action](#).



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

Getting Started:

1. Use the template on GitHub, available for download on this [link](#).
2. **Unzip** this folder.
3. Rename the unzipped folder as **Project 21**.
4. **Import** this folder **into VS Code**.
5. Start editing your code in **sketch.js**.

Specific tasks to complete the Project :

1. Two colored surfaces at the bottom of the canvas are already created for you.

```
block1 = createSprite(0,580,360,30);  
block1.shapeColor = "blue";  
  
block2 = createSprite(295,580,200,30);  
block2.shapeColor = "orange";
```

2. Now you have to create two other blocks, i.e., **block3** and **block4**.

```
//create two more blocks i.e. block3 and block4 here
```

3. A box sprite is already created for you.
 - You have to add X and Y Velocity to it.

```
ball = createSprite(random(20,750),100, 40,40);  
ball.shapeColor = rgb(255,255,255);  
//write code to add velocityX and velocityY
```

4. We have written conditions:
 - To check if the box is touching any specific colored surface.
 - After touching the surface, changing the color of the box according to the surface it touches.
5. Similarly, you have to write code for block3 and block4 and change the color of the block as per the block color.

```
//write code to bounce off ball from the block3  
  
//write code to bounce off ball from the block4
```

6. Set velocity of the box to **zero and stop music** when it touches any specific colored surface (like in the image when the box touches orange color it stops there.)
7. Make sure the project works before you submit it.

*Refer to the images given above for reference.

Submitting the Project:

1. **Upload** your completed project to your own GitHub account.
2. Enable **GitHub** pages for the repository.
3. Copy and paste the link to the GitHub pages in the Student Dashboard against the correct class number.

Hints for the project:

1. To check if the box is touching any specific colored surface and bounce off from the surface. You can use the code given below as reference:

```
//write code to bounce off ball from the block1  
if(block1.isTouching(ball) && ball.bounceOff(block1)){  
    ball.shapeColor = "blue";  
    music.play();  
}
```

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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