

## INSTRUCTIONS:

---

### Goal of the Project:

In Class 14, you have learned how to set collider radius for trex, so that the game ends when trex touches the obstacles. You also learned how to diagnose and design a solution for the problem of disappearing objects.

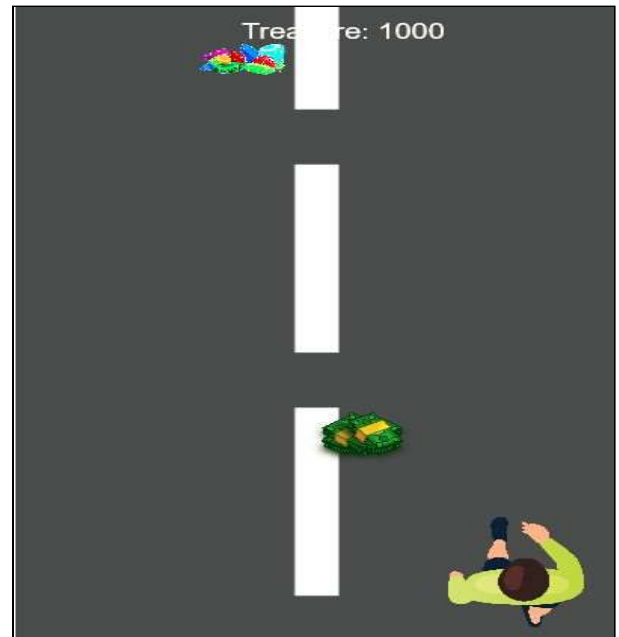
In this project, you will apply what you have learnt in the class to achieve the following goals to create a treasure collecting game:

<b>Main Goal</b>	<ul style="list-style-type: none"><li>• Create gameStates and score variables.</li><li>• Increment score by some numbers when boy sprites touch any treasure sprites.</li></ul>
<b>Additional Goal 1</b>	Show the gameEnd animation when a boy sprite collides with a sword sprite.
<b>Additional Goal 2</b>	Destroy all sprites to show the complete game end design.

### Story:

Sahil loves treasure hunting and he wants to create a treasure collecting game. He has already created a complete design of the game. Now he wants to add a scoring system in his game.

Can you help him in creating a scoring system?



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

### Getting Started:

1. Login to p5.js editor.
2. Click on the following link: [Project Template](#).
3. Click on "**Duplicate**" under the **File menu**. This will create a copy of the sample project in your account.
4. Rename the project to **Project 14** and click on **Save** under the File menu.
5. Start writing code in sketch.js file.
6. Download the images from [here](#) and add it to your project.

### Specific Tasks to Achieve the Main Goal:

1. Increase the size of canvas and shift the boy's position.
2. Give the **gameStates** as PLAY and END:

```
//Game States  
var PLAY=1;  
var END=0;  
var gameState=1;
```

3. Create a **treasureCollection** variable and set it to 0.
4. Now add conditions to increment **treasureCollection** by some numbers like 50,100,150. When the boy touches cash, jewellery and diamond sprite groups.
5. Click on "**Play**" once to check if it is working.

\*Refer to the images given above for reference.

**\*\* When the boy touches a sword no increment in treasureCollection is needed to be done.**

### Submitting the Project:

1. **SAVE** all the changes made to the project.
2. Copy the link of your browser's address bar and paste it in the Student Dashboard Projects panel against the correct class number.

### Hints for the Main Goal:

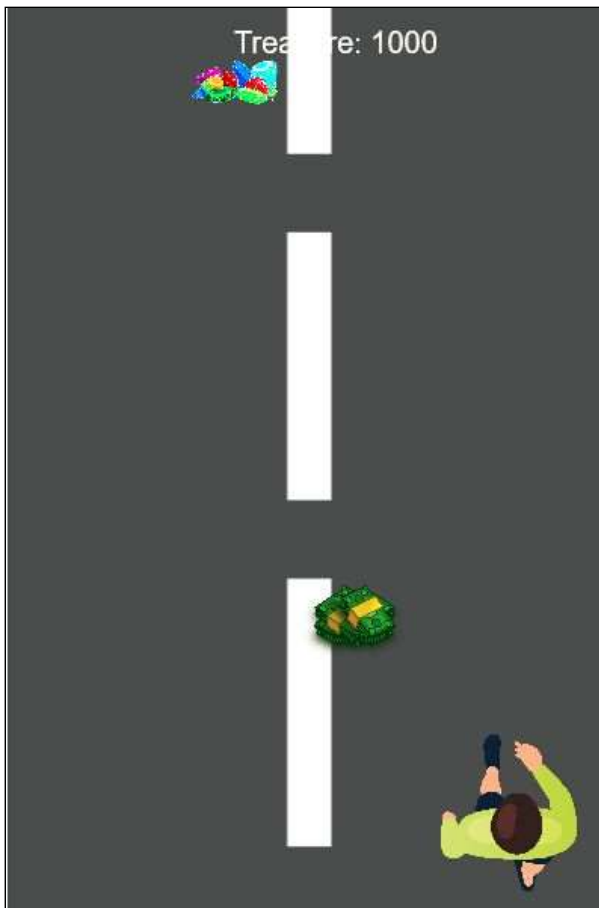
1. You can use the code block given below for incrementing **treasureCollection** :

```
if (cashG.isTouching(boy)) {  
  cashG.destroyEach();  
  treasureCollection=treasureCollection+50;  
}
```

**Additional Goal 1:**

Now Sahil wants to add gameEnd animation in his game.

Can you help him in adding game end functionality?

**Specific Tasks to Achieve Additional Goal 1:**

1. When the boy touches any of the sword group sprites:
  - set the gameState as **END**.
  - Change the **SahilRunning** animation to game over animation.
  - Set boy's x and y positions at certain positions.
2. Click the **Play** to check if the code is working.

**\*SAVE** all the changes made to the project and **SUBMIT** the shareable link in the Student Dashboard Projects panel against the correct class number.

### Hints for the Additional Goal 1:

1. You can use the below given code to show the game over animation:

```
if(swordGroup.isTouching(boy)) {  
    gameState=END;  
    boy.addAnimation("SahilRunning",endImg);  
}
```

**Additional Goal 2:**

Sahil got stuck because he wanted to remove all the sprites when the game ended.

Can you help him in destroying all the sprites?

**Specific Tasks to Achieve Additional Goal 2:**

1. If the boy is touching a sword, go to gameState **END**.
  - Destroy all the groups.
  - Set velocity Y for all the groups to 0.
2. Click the **Play** to check if the code is working.

**\*SAVE** all the changes made to the project and **SUBMIT** the shareable link in the Student Dashboard Projects panel against the correct class number.

**Hints for the Additional Goal 2:**

1. To destroy cashG and set its velocity to 0 you can use the code given below:

```
cashG.destroyEach();  
cashG.setVelocityYEach(0);
```

2. Similarly you can destroy and set velocity to 0 for all the other groups.

\*After running the code, the output should be similar to [this](#).

**REMEMBER... Try your best, that's more important than being correct.**

After submitting your project your teacher will send you feedback on your work.

xxx

xxx

xxx

xxx

xxx