

INSTRUCTIONS:

Goal of the Project:

In Class 13 you have learned about game states PLAY and END. You also learned how to create groups, add objects in groups, and use properties and functions for groups.

In this project, you will have to practice and apply what you have learnt in the class and add all balloons in the group so that we can give them the same behavior and increment scores when an arrow bursts any balloon.

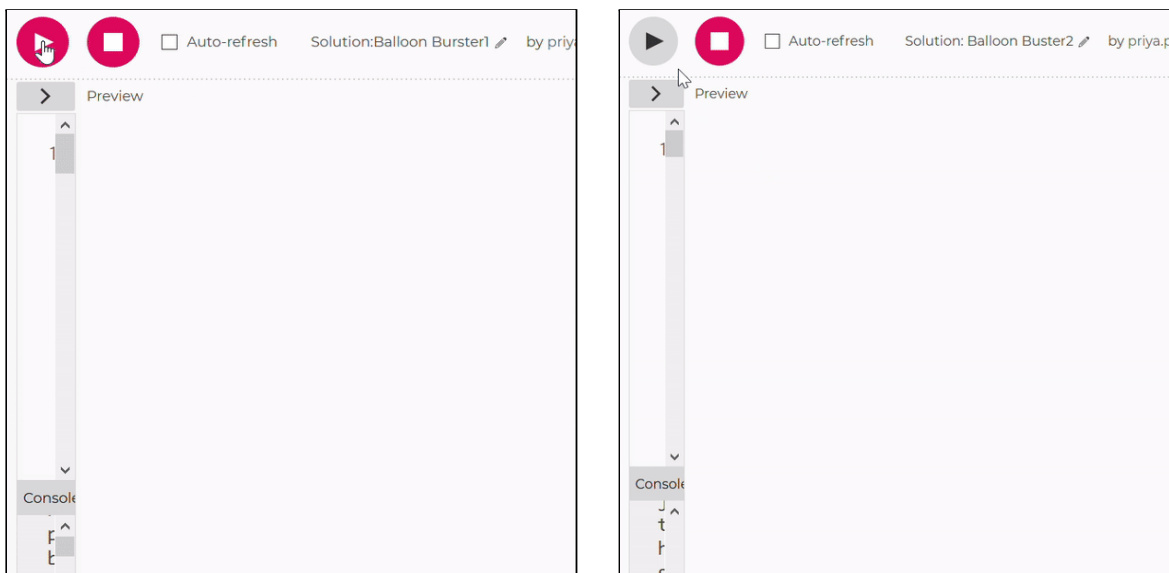
**** This is a continuation of Project 12, so make sure to complete that before doing this project. ****

Story:

You have already helped Meera in creating a complete design of the game with balloons, bow, and arrow. Now she wants to improve the game by adding a scoring system by incrementing scores with different numbers.

Finally, add a feature to the game where when an arrow hits a balloon, it gets destroyed.

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:

There are two ways you can start with this project:

Option 1:

1. Login to the p5.js editor.
2. Click on the following link: [Project Template](#).
3. Click on “**Duplicate**” under the **File menu**.
4. Rename the project to **Project 13**.
5. Click on “**Save**” under the **File menu** to save your project **OR** press **Command+s** on **Mac** and **CTRL+s** on **Windows** systems to save your project.
6. Start writing code in the **sketch.js** file.
7. Download the images from [here](#) and add them to your project.

Option 2:

If you decide to use your Project 12 as a starting point to complete this project, follow the steps given below:

1. Login to the p5.js editor.
2. Open the link for Project 12 from your **sketches** panel.
3. Click on “**Duplicate**” under the **File menu**.
4. Rename the project to **Project 13** and click on **Save**.
5. Start writing code in the **sketch.js** file.

Specific tasks to complete the project:

1. You have created functions for balloons.
2. Now create groups for each color balloon before the draw function.
 - Add all the balloons in the respective group.
 - This will be very similar to a group of clouds and obstacles that you created in the t-rex game in class.
2. Create a group for arrow function also.
3. Create the **isTouching()** function for redBalloon group and arrowGroup.
 - If an arrow touches a red color balloon:
 - Destroy the balloon.
 - Destroy the arrow.
4. If an arrow touches a specific balloon:
 - Increment the score by different values.
 - For example: For redBalloon, give 1 point.

- For blueBalloon give 3 points, etc.
5. Click on "Run" once to check if it is working.

*Refer to the images given above for reference.

Submitting the Project:

1. Click on "Save" under the **File menu** to save your project.
2. **Copy** the link of your browser's address bar.
3. **Paste** it in the Student Dashboard Projects panel against the correct class number.

Hints for the project:

1. From the Toolbox, select Group to learn about the creation of groups and using different functions of groups.
For example: Add sprite red in group redB.

```
redB= new Group();  
greenB= new Group();  
blueB= new Group();  
pinkB= new Group();  
arrowGroup= new Group();
```

2. The **destroy()** function is for individual sprites, but for groups, you have to use **destroyEach**.
3. The below given code is an example for destroying both arrow and redBalloon groups and incrementing score. Similar way you can write code for other color balloons too,

```
if (arrowGroup.isTouching(redB)) {  
    redB.destroyEach();  
    arrowGroup.destroyEach();  
    score=score+1;  
}
```

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** _____