PROFESSIONAL

CRUMPLED BALLS



INSTRUCTIONS:

Goal of the Project:

In Class 25, you learned how to assign images to bodies created by changing the blueprint of the class.

In this project, you will apply what you have learned in the class to create a virtual game of throwing crumpled paper balls in the dustbin.

Story:

You want to inculcate the habit of throwing the waste in the trash bin in young individuals and help keep your city clean. So you have decided to create a simple game of throwing crumpled paper balls in a waste paper basket.

See a video of this in action <u>here</u>.



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*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 25.
- 4. Import this folder into VS Code.
- 5. Start editing your code in **sketch.js**.

Specific Tasks to complete the Project:

- 1. Create a **Paper class**.
 - Create a circular Matter.js Body and assign the crumpled paper image to it.
 - Make sure you set the **density** of the paper to **1.2** as shown below.

```
var options={
   isStatic:false,
   restitution:0.3,
   friction:0,
   density:1.2
```

• Make sure to use the **image()** function to display the crumpled paper image for the object

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- 2. Create a paper object from the **Paper** class created in the previous step.
- 3. Write code to apply **the forces** to the **paper object** when the **up arrow** is pressed, so that the paper ball lands in the dustbin.

You can use the following code to do this:

```
function keyPressed() {
  if (keyCode === UP_ARROW) {
    Matter.Body.applyForce(paperObject.body,paperObject.body.position,{x:130,y:-145});
  }
}
```

See the video here on how this looks. Check hints

- 4. Adjust the size of the circle body and the size of the crumpled image.
 - So that it appears that the paper is touching the ground.
- 5. Make sure the project works before you submit it.

Submitting the Project:

- 1. Upload your completed project to your own github account.
- 2. Create a new repository named "Project 25".
- 3. **Upload** working code to this github repository.
- 4. Enable Github pages for the repository.
- 5. Copy the link to the github pages link in the Student Dashboard.

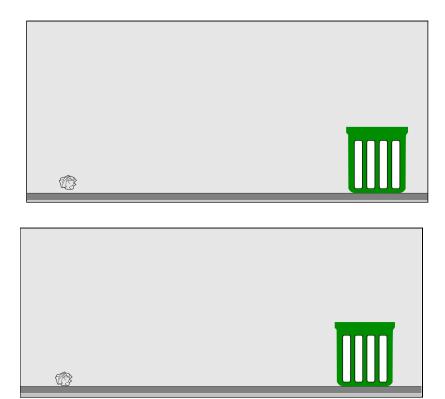
^{*}Refer to the images given above for reference.

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Hints for the Project:

1. In the images shown below, the one on the left, the paper ball looks like it is floating. This is because the size of the circular body should be smaller than the edges of the image, which is the case in the image on the right.



Make sure you adjust the radius of the circular paper body, so that it's smaller than the image.

 To make the paper object fly and fall into the dustbin when the arrow in pressed, use the Matter.Body.applyForce() Read this <u>link</u> for further reference.

REMEMBER Try your best,	that's more important t	han being correct.
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After submitting your project your teacher will send you feedback on your work.

