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.

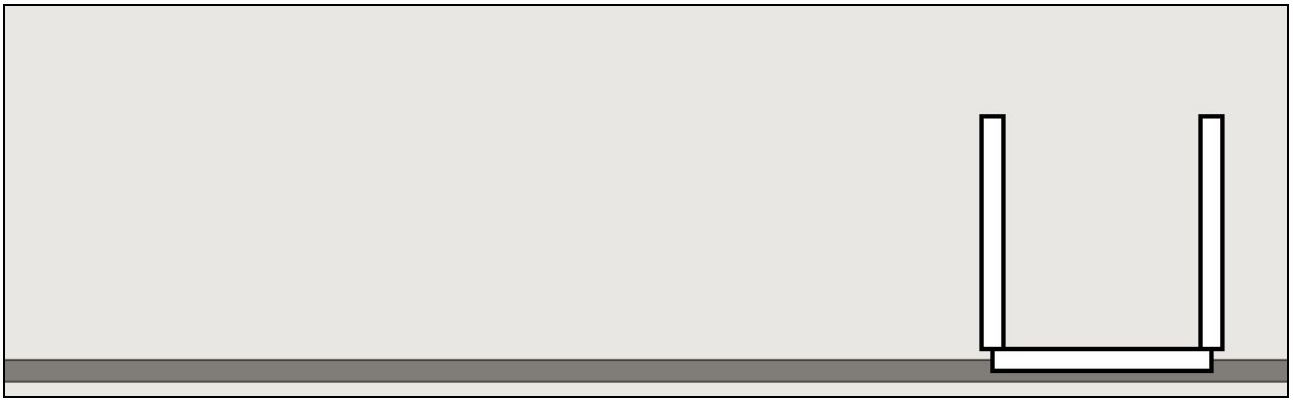
In this project, you will apply what you have learned in the class to achieve the following goals.

Main Goal	• Create a paper ball. • Write code to throw the paper ball in the dustbin container.
Additional Goal 1	• Add the image for the dustbin. • Adjust the position of the dustbin. • Show the paper ball inside 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 here.



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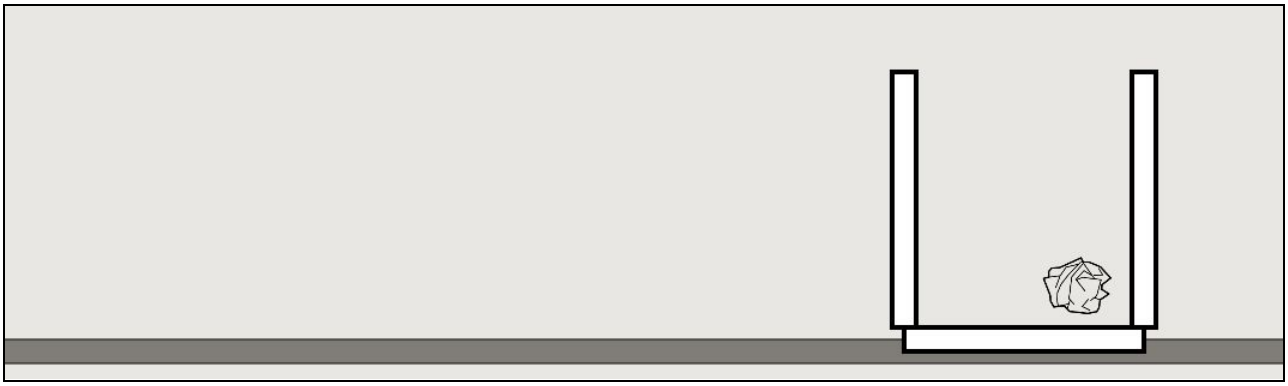


***This is just for your reference. We expect you to apply your own creativity in the project.**

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 Achieve the Main Goal:

1. Create a blueprint for the **paper class**.
    - Assign crumpled paper image to the body.
    - This object will be the moving object in the game.
    - For this project, a circle will suffice.
    - Make sure you set the **density** of the paper to **1.2** as shown below.

```
var options={
    isStatic:false,
    restitution:0.3,
    friction:0.5,
    density:1.2


    }
```

2. Create a paper object from the blueprint 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. See the video here on how this looks.

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 surfaces.
5. Make sure the project works before you submit it.

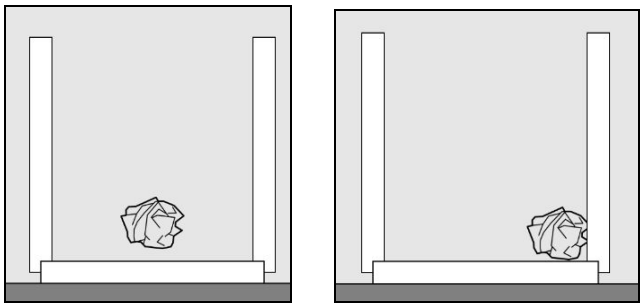
*Refer to the images given above for reference.

Submitting the Project:

1. Upload your completed project to your own github account.
2. 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.

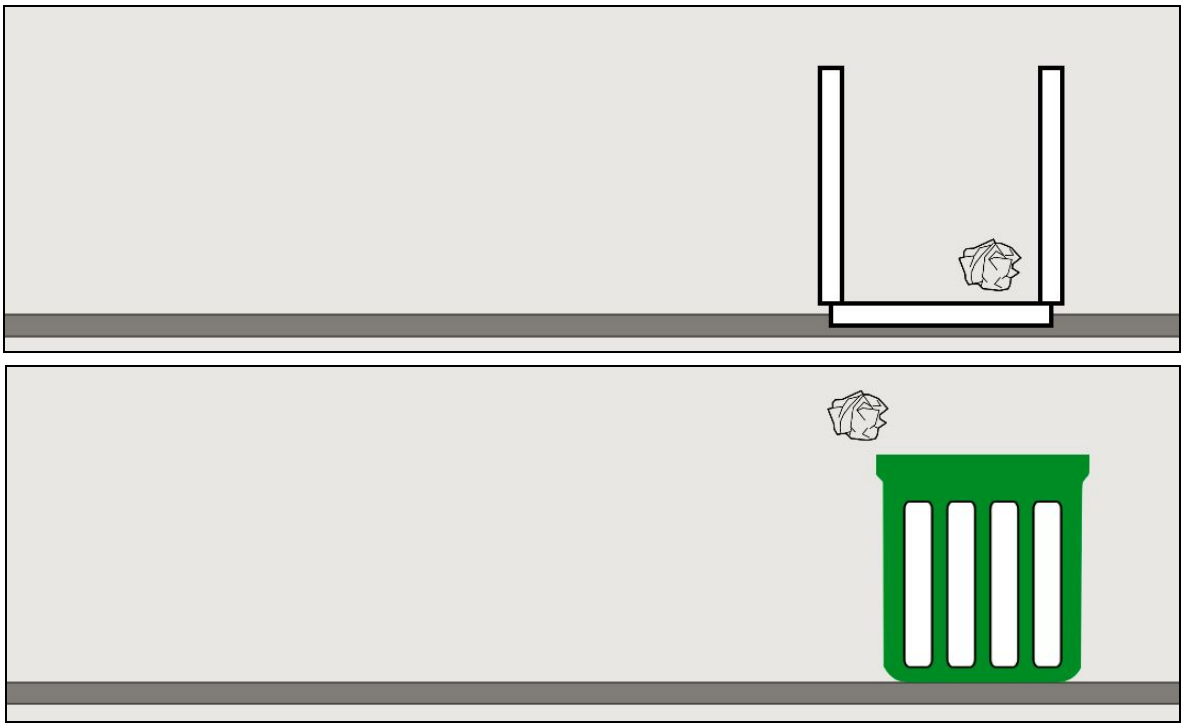
Hints for the Main Goal:

1. In the images below, the paper ball on the left 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.



Additional Goal 1:

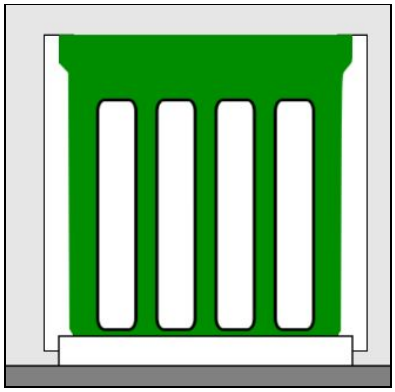
Lastly, you have to add the image for dustbin.



Specific Tasks to Achieve Additional Goal 1:

1. Modify the **dustbin class** to have this image assigned to it. The dustbin container created earlier will be in the background and you have to apply the dustbin image over it.
2. Modify position of the **dustbin** class bodies after assigning the image to it.

3. In the image below, you can see the three bodies (left wall, right wall and base) of the dustbin class in white colors as rectangles.

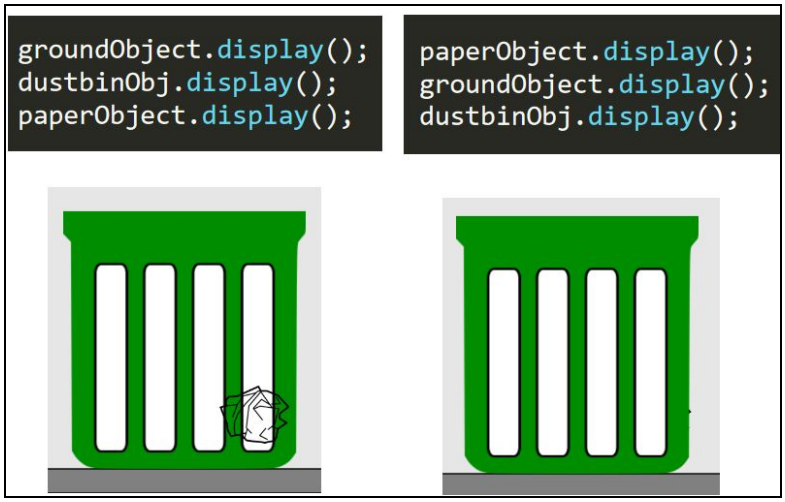


4. Make sure the project works before you submit it.

***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. By choosing the sequence in which things are drawn, it will become apparent to you that things drawn last are drawn on top of things drawn first.
    - For example: You may see an outcome like this. By drawing the paperObject first, you can ensure the dustbinObject will always draw on top of the paperObject, thereby making the trash can opaque. This will be a great way to debug how the crumpled paper is behaving inside the trash can.



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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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