

## INSTRUCTIONS:

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### Goal of the Project:

In Class 23, you learned how to create boxes using classes, and drop them so they get stacked on top of each other.

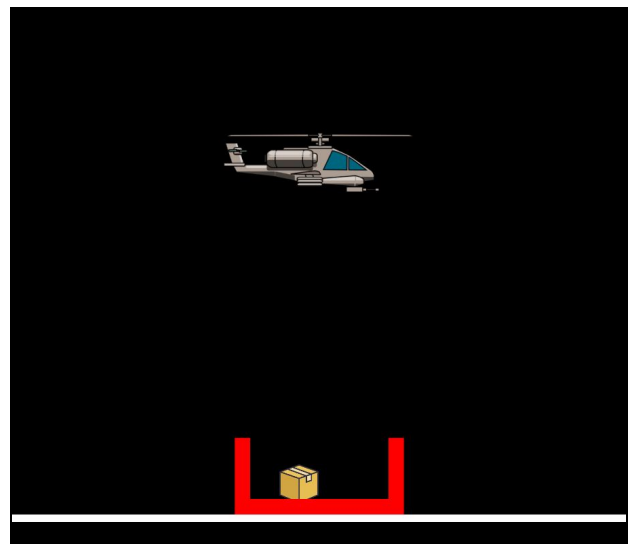
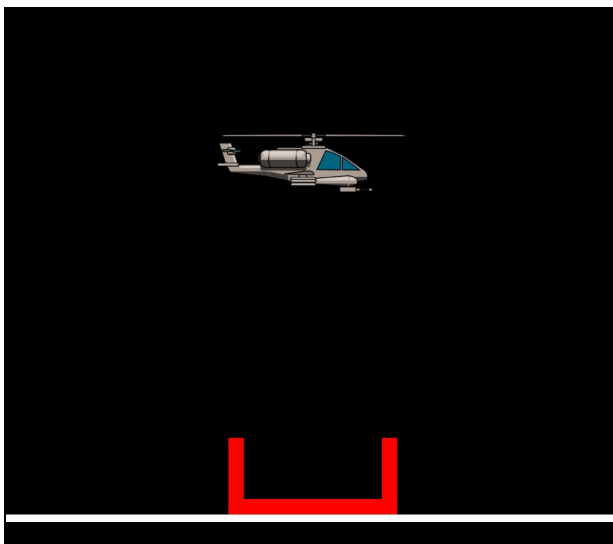
In this project, you will have to practice and apply what you have learned in the class and add a simple feature on our Project 22 of Supply Mission. We will be dropping supplies and medical kits inside a designated red drop zone in the middle of a zombie apocalypse.

**\*\* It's important to finish project 22 before this project \*\***

### Story:

You are a sergeant on a military peacekeeping mission. Your task is to drop a package in a designated red drop zone. The package contains mission-critical items and is very important to be delivered at the exact location for the success of the mission.

Everyone before you has failed to finish the task. The success of the mission now depends on you.



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

### Getting Started:

1. Use your existing project created in Project 22.
2. Make modifications to the same project in VS code.
3. Start editing your code in **sketch.js**.

### Specific Tasks to complete the Project:

1. When the mission starts, place a red box on top of the ground.
  - The box has three sides of red color, which are **static bodies**.
  - The bottom is a static body which is 20 pixels tall and 200 pixels wide.
  - The sides are 100 pixels tall and 20 pixels wide.



2. On the press of the **down arrow key**, you have to drop the package.
3. Ensure that the package does not bounce and stays inside the red drop zone.
4. 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 "**SupplyMission C23**"
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:**

1. You can set the body from static to not-static by setting its **isStatic** property to **false**. This should be done for the **package**, as it will be dropped when the down arrow key is pressed.
  - **Matter.Body.setStatic(<body Name>, false);**
  - Also see [https://brm.io/matter-js/docs/classes/Body.html#method\\_setStatic](https://brm.io/matter-js/docs/classes/Body.html#method_setStatic)

```
Matter.Body.setStatic(body, isStatic)
```

Sets the body as static, including isStatic flag and setting mass and inertia to Infinity.

Parameters

**body** Body  
**isStatic** Bool

@ src/body/Body.js:229

2. Sprites and Bodies behave a little differently.
  - For sprites the x property is directly accessible through the sprite itself.
  - A Body has a position attribute which has the X and Y attributes.

```
packageSprite.x= packageBody.position.x  
packageSprite.y= packageBody.position.y
```

3. The red box is just three rectangular bodies brought together. Here is how they look when they are separated.



PROFESSIONAL

## SUPPLY MISSION - 2



**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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