

INSTRUCTIONS:

Goal of the Project:

In Class 22, you learned how to create a ball, respond to gravity, and make it fall, then enable it to bounce off the ground.

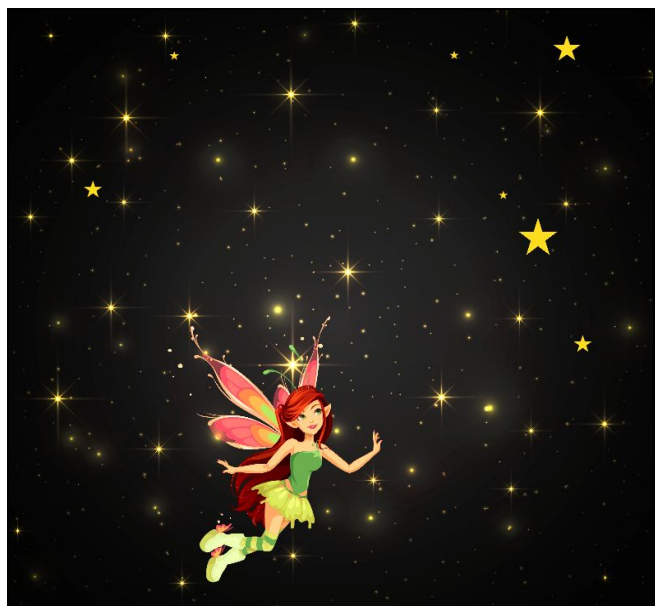
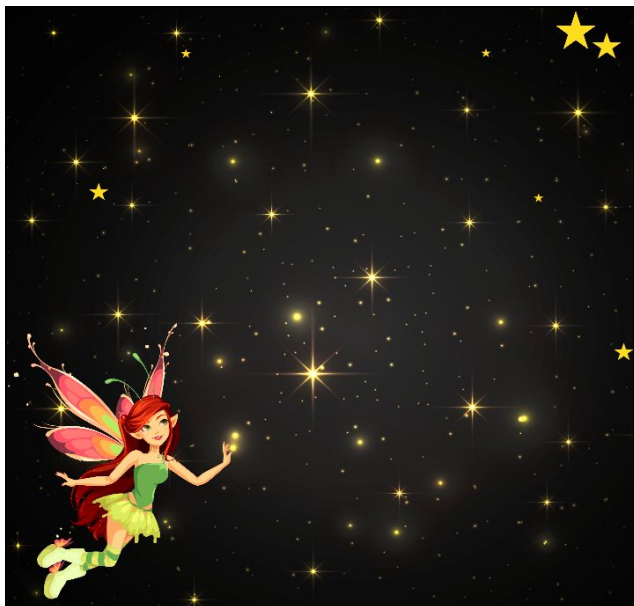
In this project, you will apply what you have learned in the class to achieve the following goals.

Main Goal	<ul style="list-style-type: none">• Move the fairy left and right using keyEvents.• Add code to show the star falling down.
Additional Goal 1	<ul style="list-style-type: none">• Stop the star in the hand of the fairy.

Story:

Sweety's younger sister Tiya loves fairy. And she asked Sweety to create a game for her in which when she presses any key the star starts falling down .

Can you help Sweety in creating this project and write the code for the game?
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:

1. Use the template on github, available for download on this [link](#).
2. **Unzip** this folder.
3. Rename the unzipped folder as **Project 22**.
4. **Import** this folder **into VS Code**.
5. Start editing your code in **sketch.js**.

Specific Tasks to Achieve the Main Goal:

1. When the game starts, you will see a fairy, and a big size star in the background. This is done in code by design.
2. You have to write code to move the fairy left and right using the **left and right arrow key**.
3. On the press of the **down arrow key**, you have to make the star fall.
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. Enable **Github** pages for the repository.
3. Copy and paste the link to the github pages in the Student Dashboard against the correct class number.

Hints for the Main Goal:

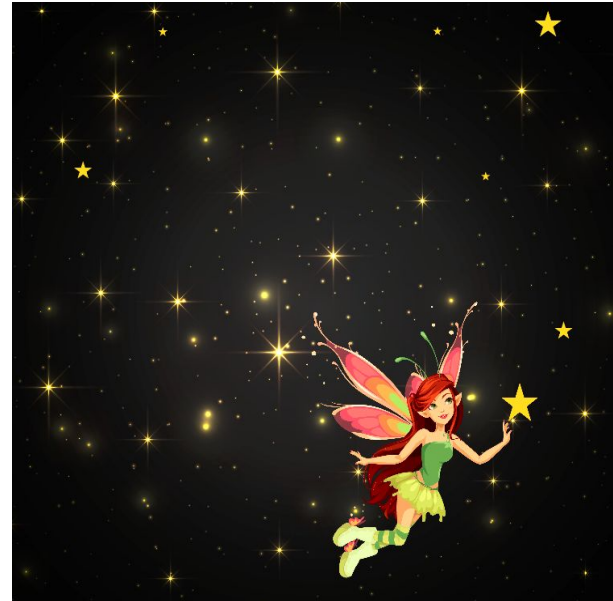
1. A lot of the code has already been written for you.
 - Please see the **Scale Method** of a sprite on [this link](#) to change its size:
2. Sprites and Bodies behave a little differently.
 - For Sprites the x property is directly accessible through the sprite itself.
 - On the other hand, a Body has a position attribute which has the X and Y attributes.

```
star.x= starBody.position.x  
star.y= starBody.position.y
```

Additional Goal 1:

You have to stop the star from falling and show it in the hand of the fairy.

Are you ready for the challenge?

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

1. You have to write an if condition such that the star stops in the hand of the fairy.

```
if( starBody.position.y > 470 ){  
}
```

2. For making the game more interesting you can add sound in it.
3. 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 Additional goal 1:

1. You can set the body from static to not-static by setting its **isStatic** property to **false**.
 - **Matter.Body.setStatic(<body Name>, false);**
 - Also refer to [this link](#).

```
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

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** —————