

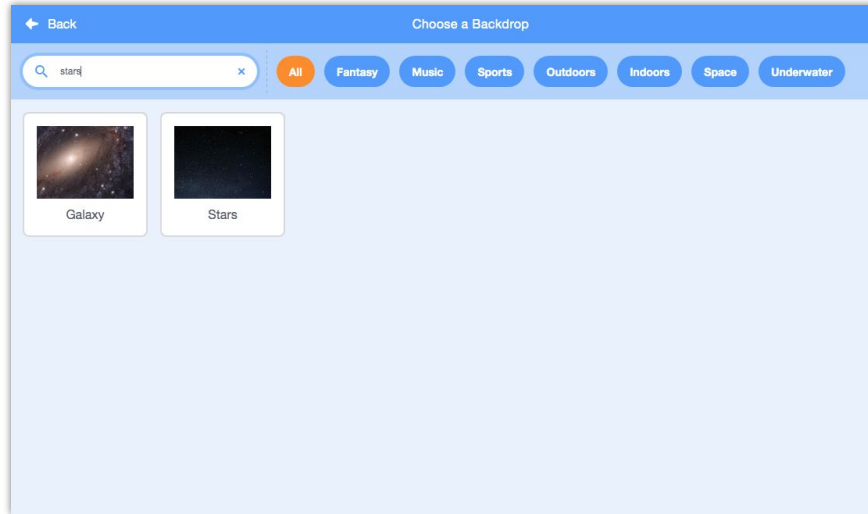
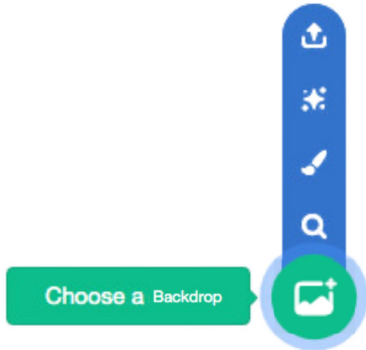
Lesson 10

Space Battle Game – Part 1

Activity 1: Setting up the Stage

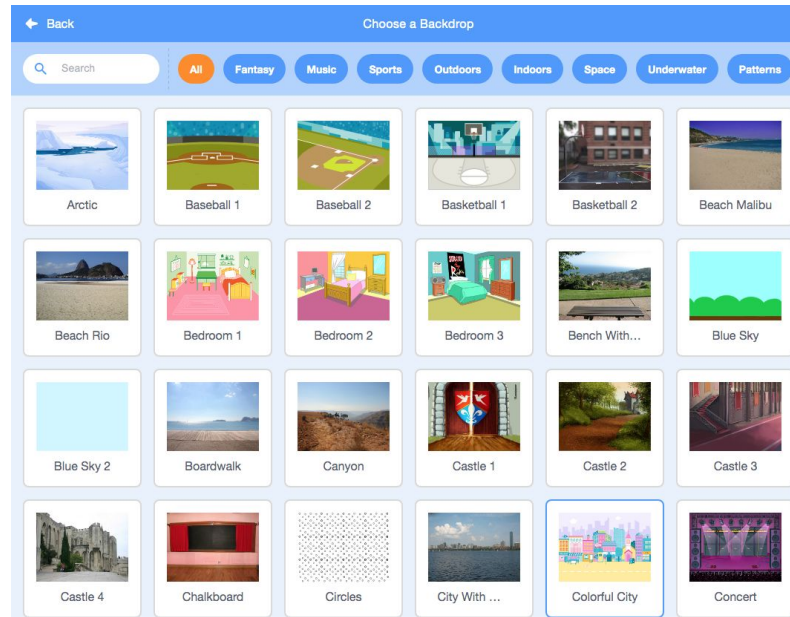
Since this battle will take place in space, we need a backdrop that looks like outer space.

*Click the **Choose a Backdrop** and select the **Stars** backdrop from the library.*



Activity 1: Setting up the Stage

“A **backdrop** is one of the many frames, or backgrounds, that a Stage can have. The Stage can change its look to any of its backdrops.



Activity 1: Setting up the Stage

Bringing in the Sprites

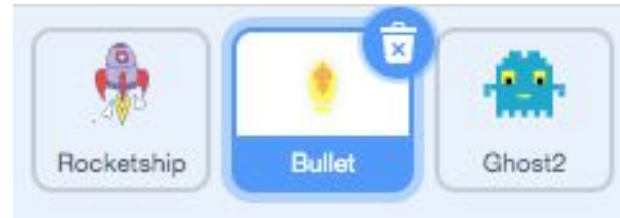
For this game, we need three sprites: our Rocketship, our enemy – the space ghosts, and something to destroy them with – special ghost-killing bullets.

Click the Choose a Sprite button and add the three sprites one by one from the library.

1 - Rocketship

2 - Ghost

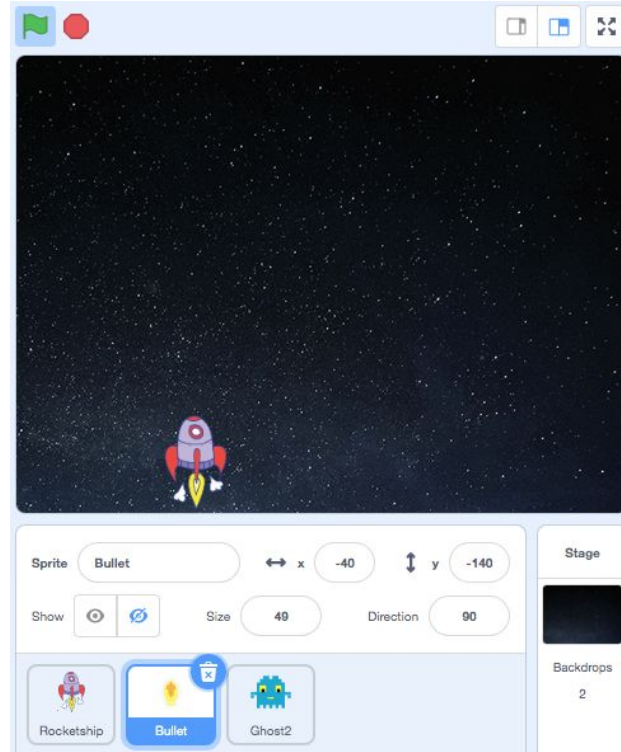
3 - bullet



Choose a Sprite



Activity 1: Giving Beetle its Moves



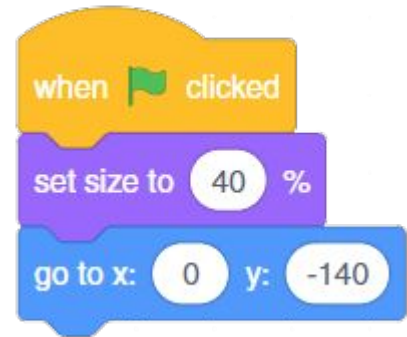
The stage is all set now!

Activity 2: Rocketship Controls

We have created the space battle game stage in the last session. Lets ready the Rocketship.

Follow the steps below to write the script, *Make sure the Rocketship sprite is selected:*

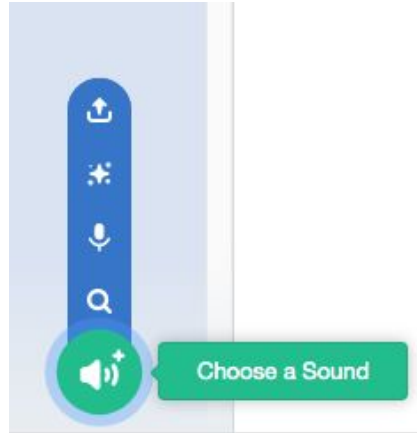
- 1 - Drag and drop a **when flag clicked** block in the scripting area.
- 2 - Drag and drop a **go to x:() y:()** block below the **when flag clicked** block. Set x as **0** and y as **-140**; this will be our Rocketship's initial position.
- 3 - Adjust the rocket's **size to () %** block using the set size. Change it to **40%** of the original size.



Activity 2: Rocketship Controls

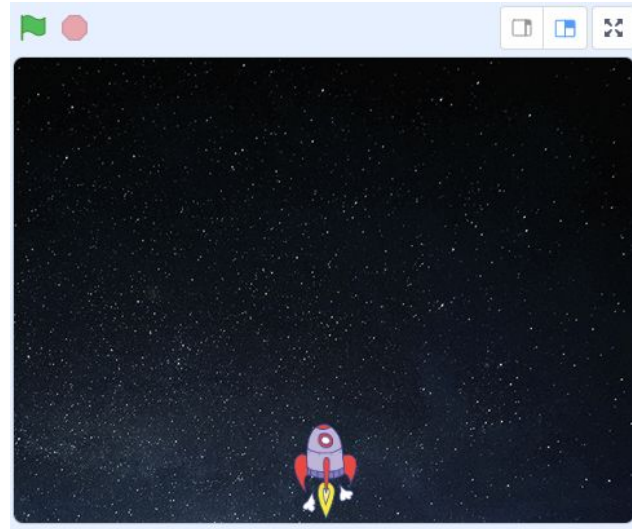
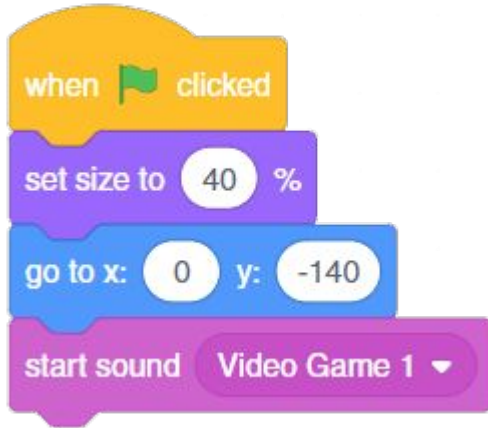
4 - This time, let's add some music

at the beginning of the game. Add the `start sound ()` block from the **Sound palette**. Now, click on the **Sound** tab; it is next to the **Code** tab in the **Block palette**. In the bottom-left corner, you will find the **Choose a Sound** button. Select **Video Game 1** from the library.



Activity 2: Rocketship Controls

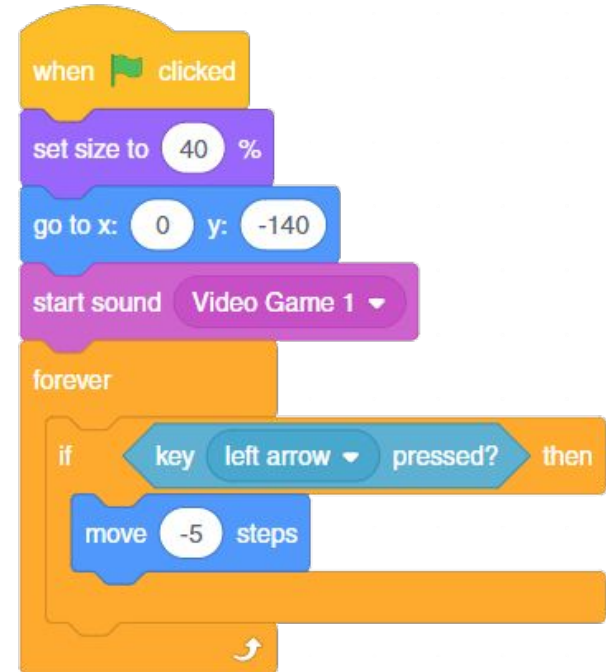
5 - To go back to writing the script, click on the Code tab. Now, from the drop-down of the start sound () block, choose Video Game 1.



Activity 2: Rocketship Controls

Now comes the fun part! **We are going to use the keyboard's arrow keys and space keys to control the actions of our Rocketship.**

- 1 - Drag and drop a **forever** block.
- 2 - Add an **if ()** block from the Control palette.
- 3 - From the **Sensing** palette, drag and drop the **key () pressed?** block and select the **left arrow** from the drop-down.
- 4 - On pressing the **Left arrow key**, move the Rocket by -5 using the **move () steps** block.



Activity 2: Rocketship Controls



Now comes the fun part! **We are going to use the keyboard's arrow keys and space keys to control the actions of our Rocketship.**

5 - Similarly, by pressing the **Right arrow** key on the gamepad, the Rocketship will go right by 5 steps.

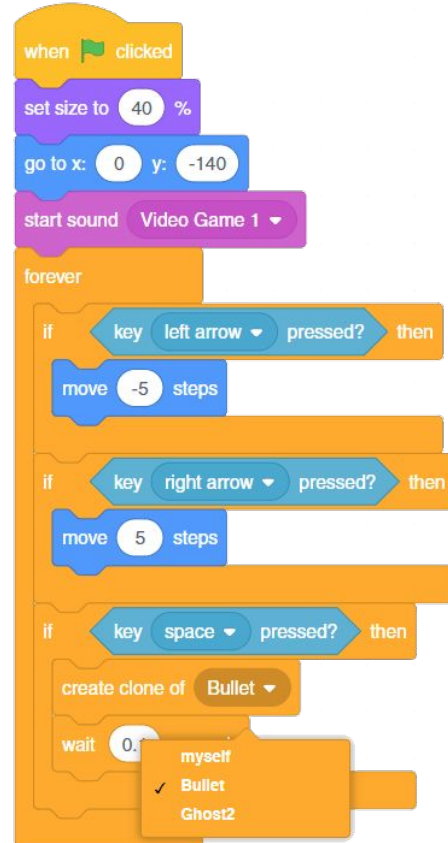
```
when green flag clicked
  set size to 40 %
  go to x: 0 y: -140
  start sound Video Game 1
  forever loop
    if key left arrow pressed? then
      move -5 steps
    if key right arrow pressed? then
      move 5 steps
```

The image shows a Scratch script starting with a 'when green flag clicked' event. It includes blocks for setting the size to 40%, moving to x: 0 and y: -140, and starting a 'Video Game 1' sound. A 'forever' loop contains two conditional blocks: 'if key left arrow pressed?' followed by 'move -5 steps', and 'if key right arrow pressed?' followed by 'move 5 steps'.

Activity 2: Rocketship Controls

6 - We will fire the bullets using the **Space bar** on the keyboard. For generating multiple bullets, we are going to use the **create clone of the ()** block. Select **bullet** from its drop-down.

Here is the complete script:



```
when green flag clicked
  set size to 40 %
  go to x: 0 y: -140
  start sound Video Game 1
  forever loop
    if key left arrow pressed? then
      move -5 steps
    if key right arrow pressed? then
      move 5 steps
    if key space pressed? then
      create clone of Bullet
      wait 0.1
      myself Bullet
```

Activity 2: Rocketship Controls

Test the code till now.

Now, Save it as

space-battle-game

