

Physics Cannon 2-Player

In this game, you and a friend can take turns launching balls by clicking on and aiming each cannon. Right now, only the right cannon works. You will be programming the left cannon.

[Click here to see an example project.](#)



In this project, you will:

- Use the physics engine
- Broadcast and receive messages
- Set physics settings
- Program a projectile

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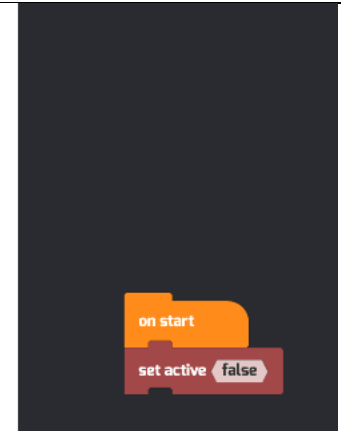
For this the first page you can hit play on the project to check it out or

JUST CLICK NEXT

Code the Left Cannon

The cannon should not be affected by physics. If it were affected by physics, it would fall to the bottom of the screen!

To start, make the cannon inactive.



For this one just Drag out the two blocks to programming area

Then JUST CLICK NEXT AGAIN

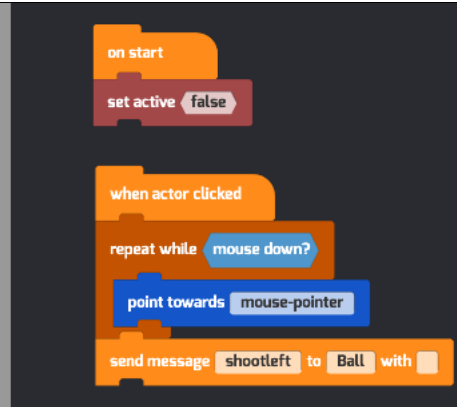
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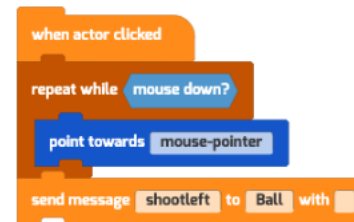
Point the Cannon

1. The cannon should only point towards the cursor when the mouse button is down. When the Actor is clicked, repeatedly check if the mouse button is down.



Just Like last level drag the blocks from instructions to programming area Then JUST CLICK NEXT AGAIN

Your code should look like this:



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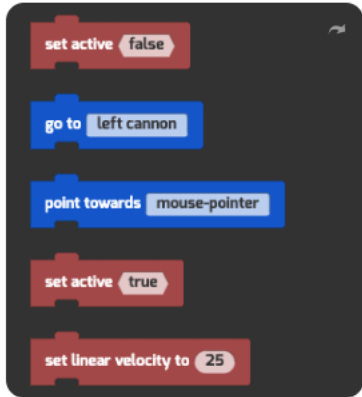
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Fire the Cannonball

There is code that positions and launches the ball when it receives "shootright," but not when it receives "shootleft."

Use these blocks to finish the launching code:



1. Set "active" to false. This prevents the ball from knocking anything over while returning to the cannon.

```
on start
  set shape to circular
  set active false
  set density to 20

when I receive shootright
  set active false
  go to right cannon
  point towards mouse-pointer
  set active true
  set linear velocity to 25

when I receive shootleft
  set active false
  go to left cannon
  point towards mouse-pointer
  set active true
  set linear velocity to 25
```

Just Like last level drag the blocks from instructions to programming

Look at their programming of shootright

You will create the shootLeft the same as the one above with blocks from instructions

Create Platforms

There are two kinds of platforms in this game:

- Platforms that fall over when hit
- Platforms that can be hit, but do not fall over

Falling platforms use these two blocks:



"Active" allows the Actor to be hit. If the Actor were circular instead of rectangular, the platforms would not stack well. Have you ever tried stacking

```
on start
  set shape to circular
  set active to false
  set density to 20

when I receive shootright
  set active to false
  go to right cannon
  point towards mouse-pointer
  set active to true
  set linear velocity to 25
  set active to true
  set shape to rectangular

when I receive shootleft
  set active to false
  go to left cannon
  point towards mouse-pointer
  set active to true
  set linear velocity to 25
  set active to true
  set shape to rectangular
```

Final step add the blocks from the instructions to both shootright and shootLeft

Add Targets

Targets have the same code as movable platforms. The only difference is their appearance.

Duplicate some active platforms and change their Costumes to create targets.



Now try your code and play with both the cannons

When done playing just click I'm Done

