




# How to make "Cat GO Fight"!

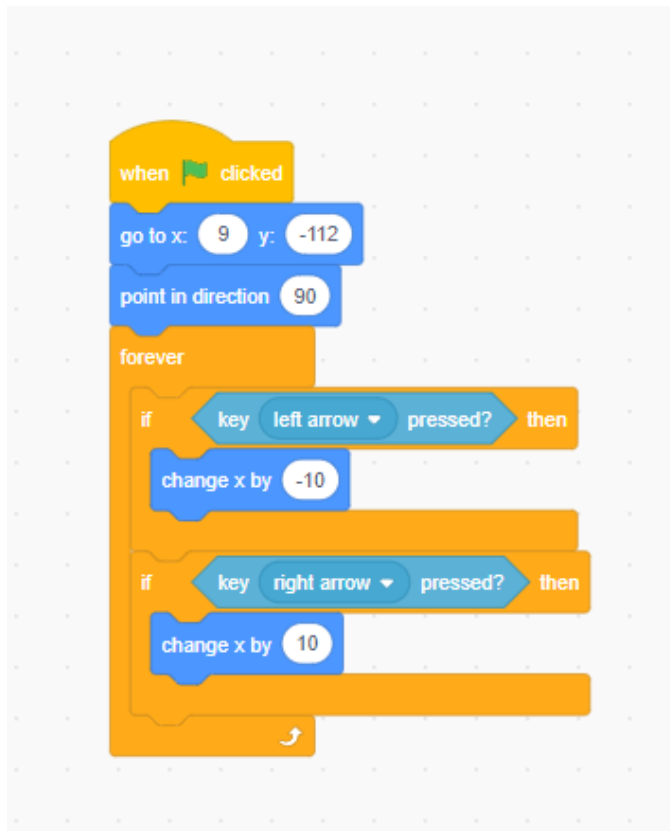
## Part 1: Sprites and Costumes


Create a new project by clicking on your profile > My Stuff > New Project.


Firstly, you need to choose a background for your game. Press the purple choose background button  and pick a background for your game from the list. This will be the setting for the game and could be anything you want!

## Part 2: Movement

Now, we can start working on the code for the main character. First, we need to setup basic movement. Copy this code.






This code starts when the project starts, because of the  header block. We then move the cat to the ground and make it point to the right. Then we have a forever loop, this makes the code run until the project stops. In that loop we have 2 if statements, these make the cat move left and right when you press the arrow keys.


Now, let's test your game. Click on the Green Flag () near the corner of your screen. If you press the arrow keys on your keyboard the cat should move!


## Part 3: Fixing the movement


You may have noticed that the cat is not looking where it's going, because this is a major health and safety risk, we need to fix this.

At the top of your screen, look for a  **Costumes** tab and open it. Then change  **costume1** to  **Right**, this is important as it will make it easier

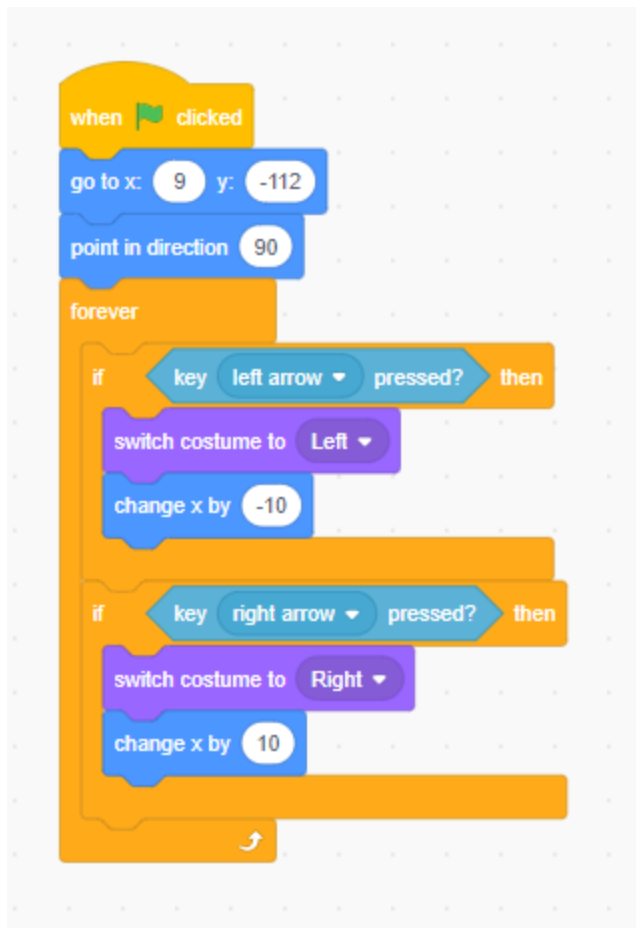
to code later. Now click on  and then click on the  icon, we are


removing this because we do not need it. Now right  click on

click on . Now, rename this sprite to "Left". Last step, click on

 **Flip Horizontal**. Go back to the code section by clicking on  **Code** button.



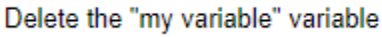
Now, change the code in the cat sprite to...




Now, let's test your game again. Click on the Green Flag () near the corner of your screen. If you press the arrow keys on your keyboard the cat should move and face the same way! Health and safety risk solved.

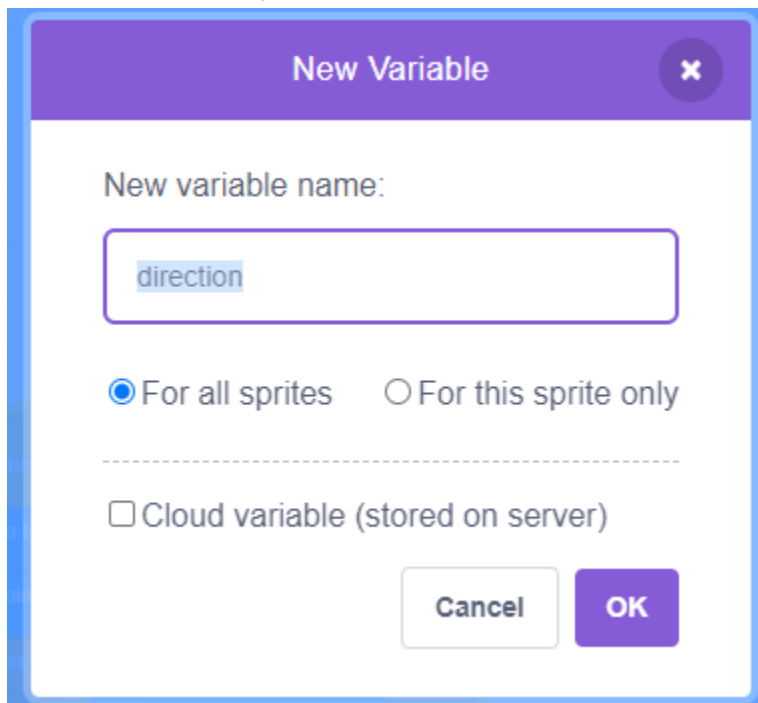
## Part 4: Last bit of movement stuff

Let's finish up some movement code to make it easier for us later.

Open the  Variables tab by clicking on it. Then right click on  and click . We will not use the "my variable" variable in our code.

Now, we need to make a new variable to store the direction of the player. Click on

, then fill out the form like this



The image shows a 'New Variable' dialog box with a purple header and a blue border. It contains a text input field with 'direction' entered, two radio buttons for 'For all sprites' (selected) and 'For this sprite only', a dashed line, a checkbox for 'Cloud variable (stored on server)', and 'Cancel' and 'OK' buttons at the bottom.

New Variable

New variable name:

direction

☒ For all sprites ☐ For this sprite only

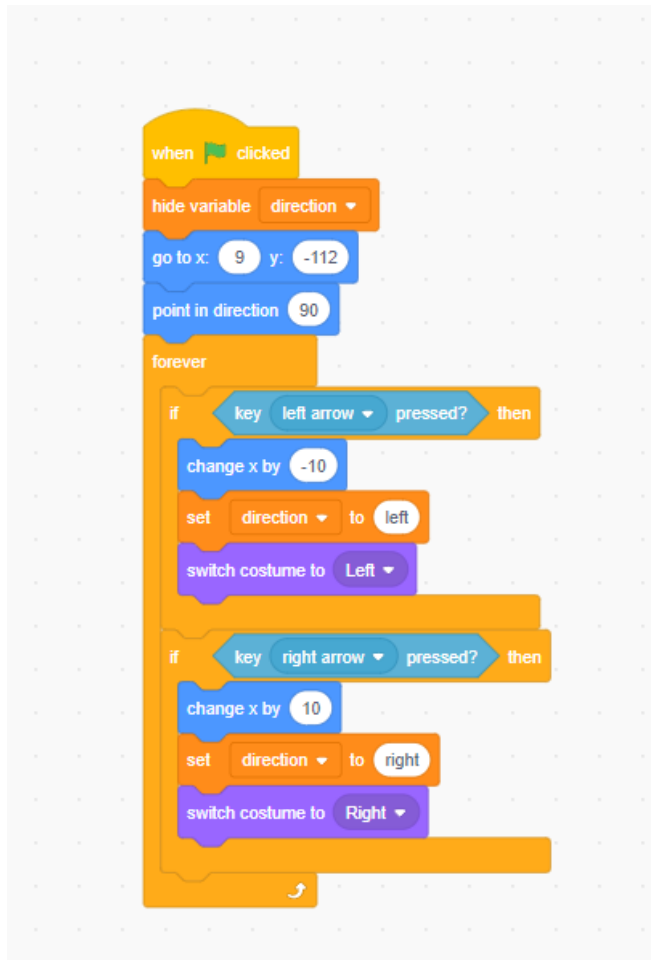
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☐ Cloud variable (stored on server)

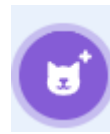
Cancel OK

And click "OK".

Now, change the code in the cat sprite to...



## Part 5: Making the boomerang




Create a new sprite in your project by clicking on the list. This will be the boomerang sprite!

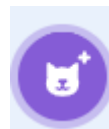
Then, Add this code to the Boomerang Sprite...

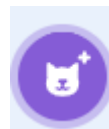


This code makes the boomerang go to the player, makes sure the boomerang is visible and (in a loop) allows the player to control the boomerang, via the direction variable we made earlier!


Now, let's test your game again! Click on the Green Flag () near the corner of your screen. If you press the arrow keys on your keyboard the cat should move, and the boomerang should move as well! The game just needs some enemies then where done!

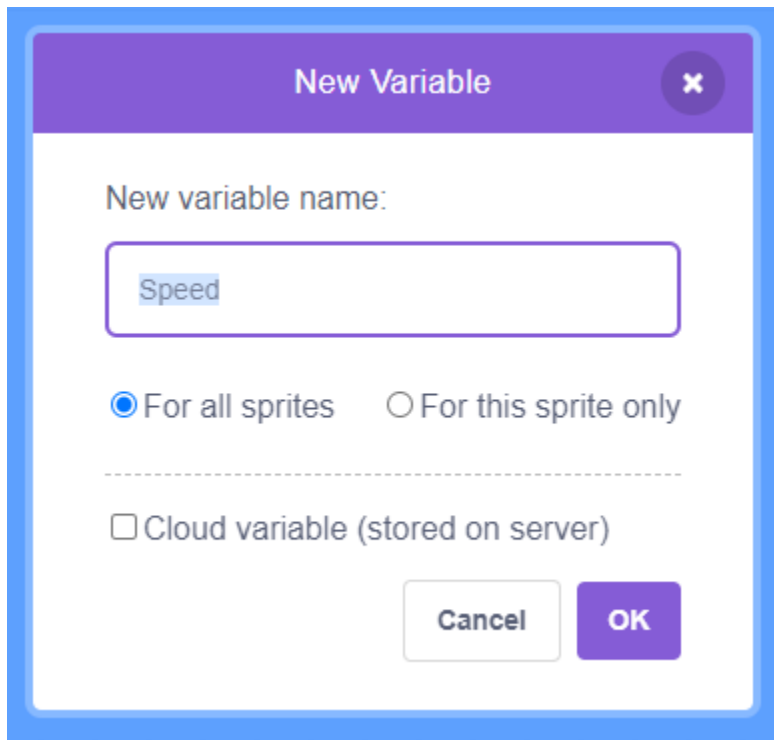
## Part 6: Enemies!



Create a new sprite in your project by clicking on  and pick a sprite from the list. This will be the enemy sprite.

Now, we need to make a new variable to store the speed of the game. Click on

, then fill out the form like this



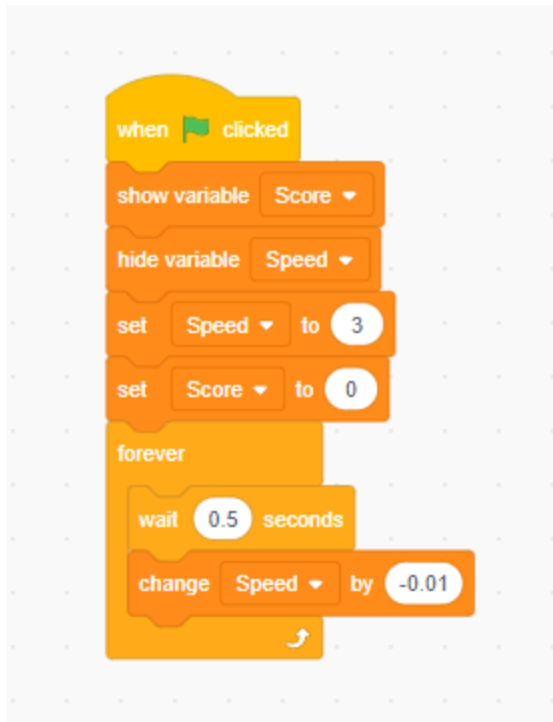
The image shows a 'New Variable' dialog box with a purple header and a blue border. The header contains the text 'New Variable' and a close button (X). The main area is white and contains the following elements: a label 'New variable name:' followed by a text input field containing the word 'Speed'; two radio buttons, the first labeled 'For all sprites' (which is selected) and the second labeled 'For this sprite only'; a dashed horizontal line; a checkbox labeled 'Cloud variable (stored on server)'; and two buttons at the bottom, 'Cancel' and 'OK'.

And click “OK”.

Now, make another variable called Score. This is to show the score of the player.

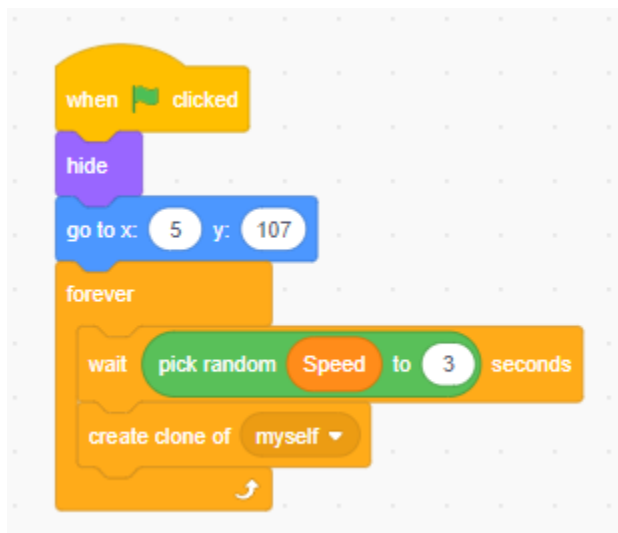
Add this code to the enemy sprite...





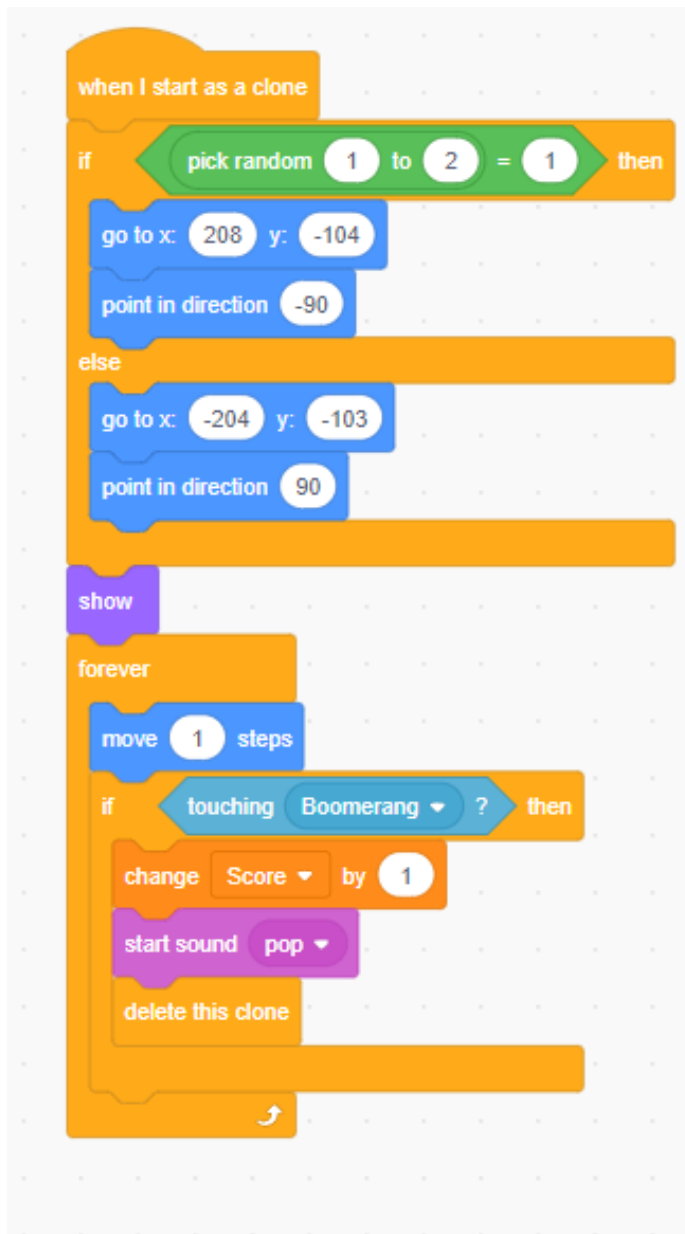
This resets all the variables and gradually decreases the speed variable.

Also add this code...



This uses scratch's clone system to create clones of the enemy, with a break between (Speed) and 3 seconds. Speed will become smaller, meaning the game will speed up and get harder.

Finally, add this code to the enemy sprite...

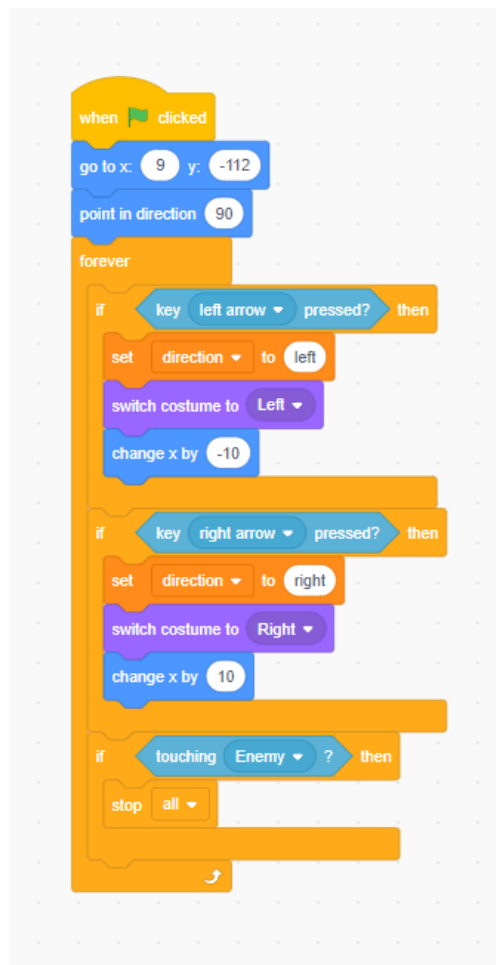



This code makes the enemies move and die when you shoot them.

## Part 7: Why won't the cat die?

You may have noticed that the cat is not dying, lets fix this.

Change the code in the cat sprite to this...



Now, let's test your game again! Click on the Green Flag () near the corner of your screen. If you press the arrow keys on your keyboard the cat should move, and if you touch an enemy you die! You're done!

## Part 8: What next?

You're done! Now, think what you could do to improve your game. You could add powerups that allow the cat to jump, you could make it harder, or you could make multiple types of enemies.

You can see our versions of the game here:

Cat Ninja: <https://scratch.mit.edu/projects/886912215>

Cat Ninja (Harder): <https://scratch.mit.edu/projects/884288282>

Cat Ninja (With Powerups): TODO

Other People Projects (Add Yours!): <https://scratch.mit.edu/studios/33528608>