

# Scratch 2

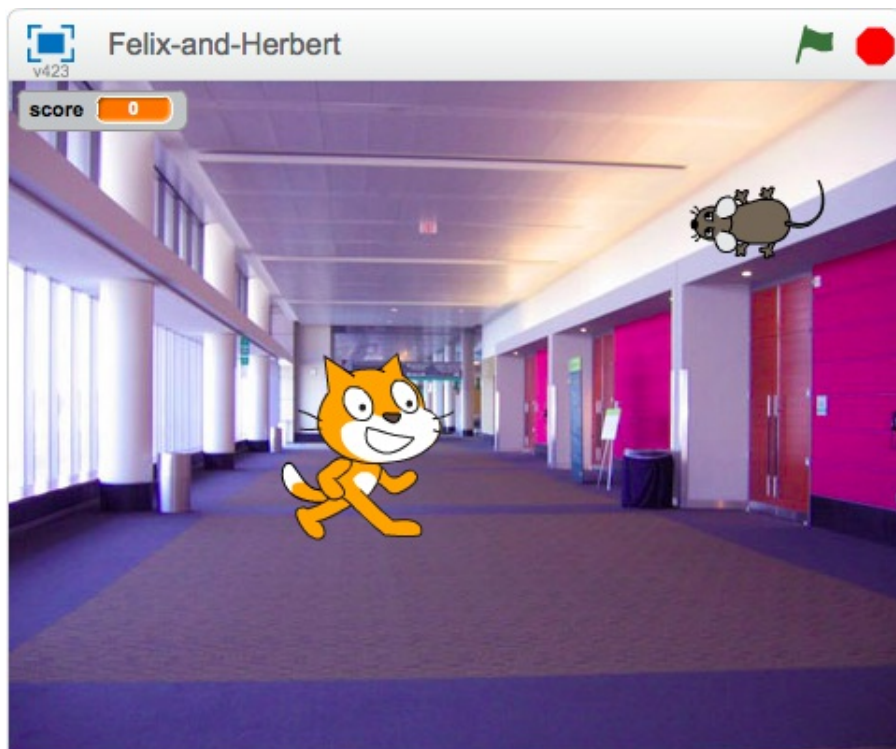
## Felix and Herbert

{codeclub  
world.org}

All Code Clubs must be registered. Registered clubs appear on the map at [codeclubworld.org](https://codeclubworld.org) - if your club is not on the map then visit [jumpto.cc/18CpLPy](https://jumpto.cc/18CpLPy) to find out what to do.

### Introduction

We are going to make a game of catch with Felix the cat and Herbert the mouse. You control Herbert with the mouse and try to avoid getting caught by Felix. The longer you avoid him the more points you score, but don't get caught because your score will go down!



**Activity Checklist**

Follow these **INSTRUCTIONS** one by one



**Test your Project**

Click on the green flag to **TEST** your code



Save your Project

Make sure to **SAVE** your work now

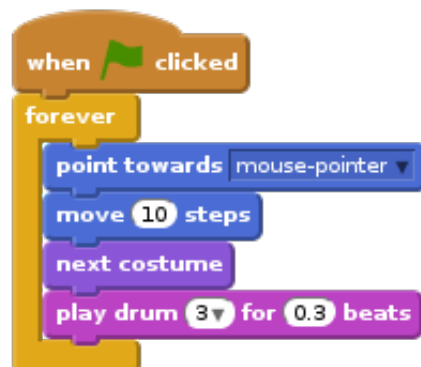
## Step 1: Felix follows the mouse pointer

### ✓ Activity Checklist

1. Start a new project. ☐
2. Click on the stage next to the sprite and switch to the **Backdrops** tab, and then click the **Choose Backdrop from library** button and choose the backdrop indoors/hall. Delete the original blank backdrop. ☐
3. Click on the sprite, and then click on the **i** button to the top left of the Sprite. Change the name of the sprite to Felix. ☐
4. Make sure Felix only points left-right by clicking this button: ☐



5. Create this script: ☐



### 🚩 Test your project

Click the green flag.

Does Felix follow the mouse pointer?

Does it look like he's walking when he moves?

Does he move at the right speed?



Save your project

## Step 2: Felix chases Herbert

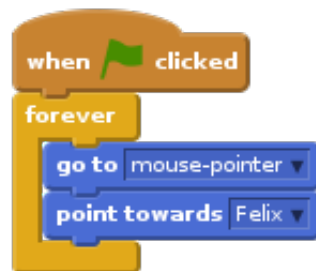
Next, we want Felix to chase Herbert the mouse, rather than the mouse pointer.

### ✓ Activity Checklist

1. Create another sprite using the `choose sprite from library` button and selecting animals/mouse1. ☐
2. Change the name of the sprite to Herbert. ☐
3. Switch to the Costumes tab, then click on the costume in the Paint Editor. A box will appear around the costume. Drag a corner of the box to make Herbert smaller than Felix. ☐
4. Make sure Herbert only points left-right by clicking this button: ☐



5. Give Herbert this script: ☐



### 🚩 Test your project

Click the green flag.

Does Herbert move with the mouse pointer?

Does Felix chase Herbert?



Save your project

## Step 3: Felix says when he's caught Herbert

We want Felix to know when he's caught Herbert, and tell us.



### Activity Checklist

1. Change Felix's script to be this:



### Test your project

Click the green flag.

Does Felix say when he's caught Herbert?



Save your project

## Step 4: Herbert turns into a ghost when he's caught

Instead of Felix saying something, we want Herbert to turn into a ghost when he's caught.

### ✓ Activity Checklist

1. Change Felix's script to send this message when he catches Herbert:



2. Add a new costume into Herbert by selecting Herbert, going into the Costumes section, and clicking the **Choose costume from Library button**. Select the fantasy/ghost2-a costume.
3. Make the costume smaller by clicking on it in the Paint Editor, and dragging the box that appears, to resize it.
4. Change the names of Herbert's costumes so the mouse costume is called 'alive' and the ghost costume is called 'dead'.
5. Create a new script for Herbert to turn him into a ghost:





## Test your project

Click the green flag.

Does Herbert turn into a ghost when he's caught?

Does Felix play the right sounds at the right time?

Does Felix still stay still for long enough for Herbert to get away?



Save your project

## Step 5: Keep score

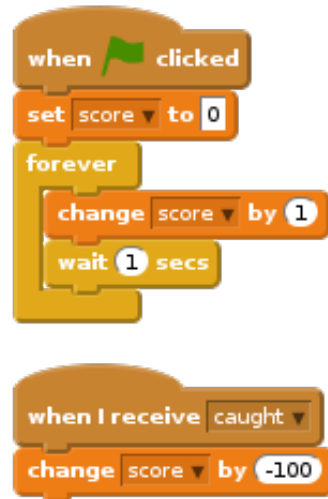
Let's add a score so we know how well we do at keeping Herbert alive.

We'll start the score at zero and increase it by one every second. If Felix catches Herbert, we'll reduce the score by one hundred.



### Activity Checklist

1. Make a variable, for all sprites, called Score. Click on **Data** in the top menu, make a variable and name it **score**, ensuring that "For all sprites" is selected. ☐
2. On the stage, create these two scripts: ☐



## Test your project

Click the green flag.

Does the score go up by one every second?

Does the score go down by one hundred when Herbert is caught?

What happens when Herbert is caught before score reaches one hundred? Does the score go back to zero when you start a new game?



## Save your project

Well done, you've finished! Now you can enjoy your game!

Don't forget you can share your game with all your friends and family by clicking on Share on the menu bar!