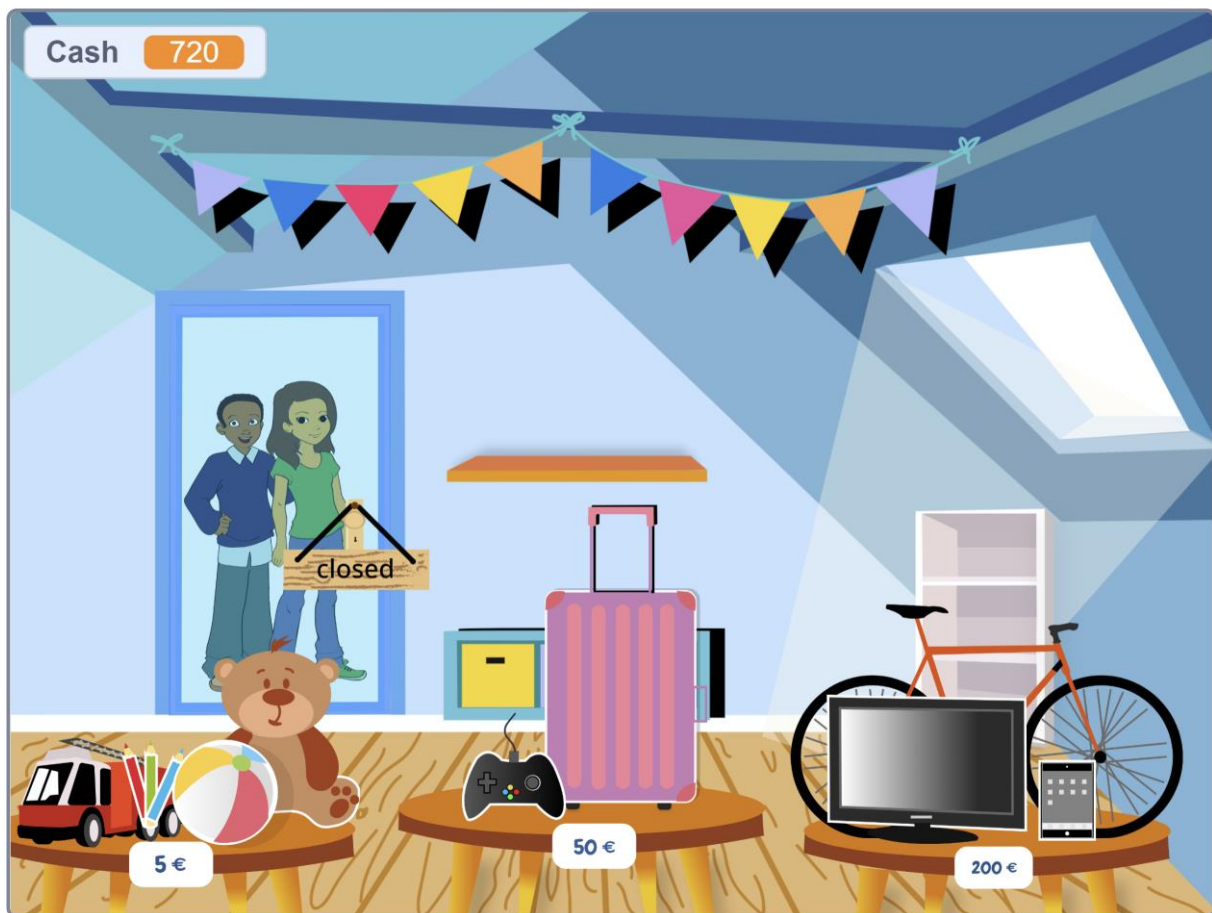


Introduction

Today you will learn how a flea market works.

In this game, you guess how much your old toys are worth - otherwise no one will buy them!
Can you sell everything at a fair price?



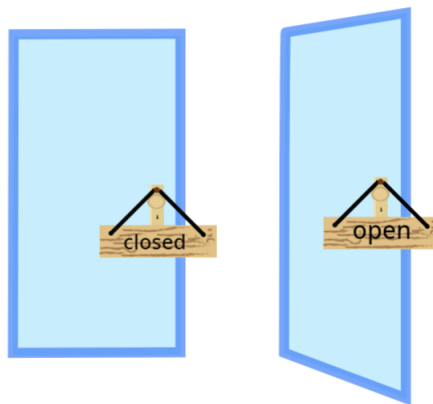
Step 1: Open the door

Remix the following project, which already contains many pictures for your flea market.

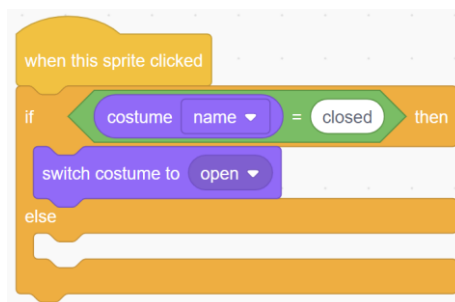
<http://tiny.cc/cclu-fs-en>

✓ Activity Checklist

- If you prefer a different setting, you can of course choose a different background image.
- The door must be able to open and close. It will be used to determine the beginning and the end of the flea market. For this purpose, it has 2 costumes: "closed" and "open".



- To make the door look open when it is clicked, it simply changes its costume. Click on the door sprite and give it this code:



You will find the green = block in the „Operators“ section.
You can use it to test whether two values are the same.



Save your project

Step 2: Send messages

The door should tell all the other sprites when it opens and closes. To do this, we will send messages!

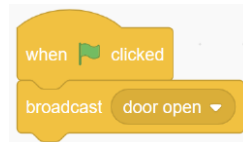
- door closed = the flea market is closed
- door open = the flea market starts

As long as the door is still closed, the seller can arrange the toys on the tables.

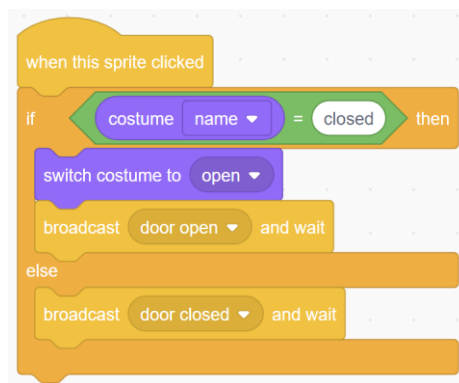
As soon as the door opens, the flea market starts, and customers are allowed to come in.

Activity Checklist

- Select the door sprite and add the following script. This tells everyone that the door is closed at the beginning of the game.



- Now change the code from step 1: Broadcast a message with "door open" or "door closed", so that everyone knows when there is a change.



- Test your code. Does everything work as expected already? No problem, there is still room for improvement!



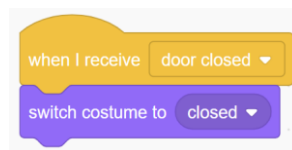
Save your project

Step 3: Receive messages

Now you will make sure that all sprites respond to the door's messages.

✓ Activity Checklist

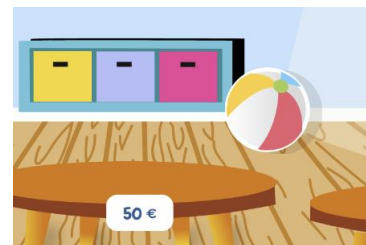
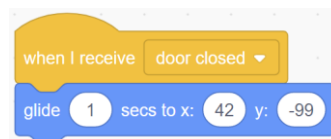
- Add this code to the door so that it listens to its own message: It should close when it commands itself to do so.



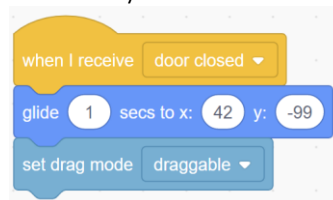
- The toys should also receive these messages. Start with the ball, for instance! You will take care of the other toys later, when you have finished coding the ball.



- Program the ball so that it returns to its place when the door closes: First drag the ball to a suitable position and then grab the blue "glide" block so that the ball always returns to that same spot.



- The toys should be "draggable" so that you can move them around with the mouse.



Save your project

Step 4: Hide the items

Now you need tables to sort the things you sell into 3 price categories.

The ball should disappear when it is sold. Meaning: when the door opens, it will hide if it is on the right table. So it's the toys that will check whether or not they are on the correct table.

As the game developer, you determine the price of the items, which the players then have to guess. For example, the ball belongs on the 5€ table.

Activity Checklist

- If the ball touches the 5€ table *when* the flea market starts, then it hides. If not, it will stay on the wrong table.

```

when I receive door open
  if touching 5€ ? then
    hide
  else
    show
  
```

- When the door closes, the ball should show itself again.

```

when I receive door closed
  show
  glide 1 secs to x: 42 y: -99
  set drag mode draggable
  
```

- Test your program!
Does the ball disappear as planned on the €5 table when the door opens?
Does it stay on the other tables?
Does it reappear when you close the door?



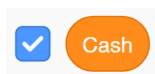
Save your project

Step 5: Sell the items

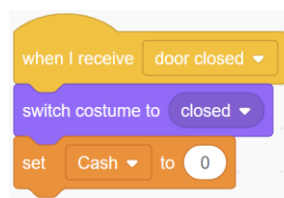
Now it's time to collect some money.
The money represents your score.

Activity Checklist

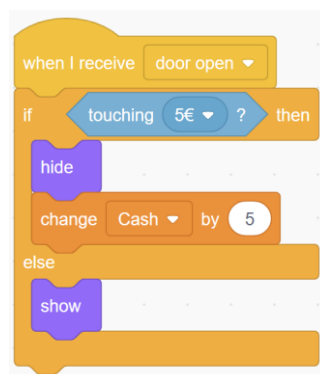
- First create a new variable and call it "Cash". Position the cash display in a corner of the stage. If the variable is not yet displayed on the stage, then tick the checkbox next to the variable's name.



- At the beginning of the flea market, the score should always be "0". To do this, change the code of the door:



- You should earn cash every time you sell a toy. Change the code of the ball:



- Test your project!
Does the ball sell successfully for 5€?
Then you can now add the rest of the items!

Step 6: More items

The following sprites are part of the starter project.

Program them like the ball and make sure that they fit into the right price category.

5€ table:



50€ table:



200€ table:



Activity Checklist

- You don't have to rewrite the code for each toy! You can drag the two scripts from the ball onto each new sprite and duplicate your code that way.

Afterwards, you only need to adjust the starting position, the matching table and the money value.

- Test your project!
Do all the toys sell for the right price?

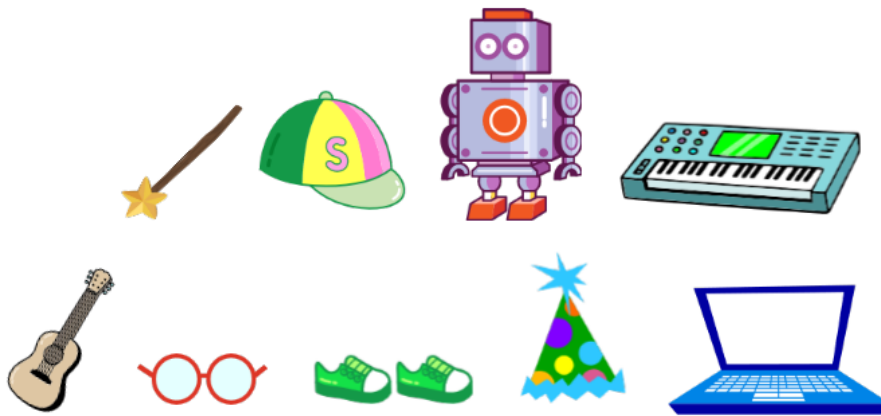
When you are happy with your game, then let some of your friends have a try!
Can they guess all the prices correctly?
Do they find any problems?
Can they suggest any new ideas?



Save your project

Challenge: Add more items to sell!

You can expand your flea market as much as you like.
Here are a few examples of images that you can find in Scratch:



Challenge: Play a fanfare when everything has been sold!

Hint: Look for the "Tada" in the sounds gallery
and play this sound *when* the door is clicked,
if the cash score and the total value of the toys are equal.