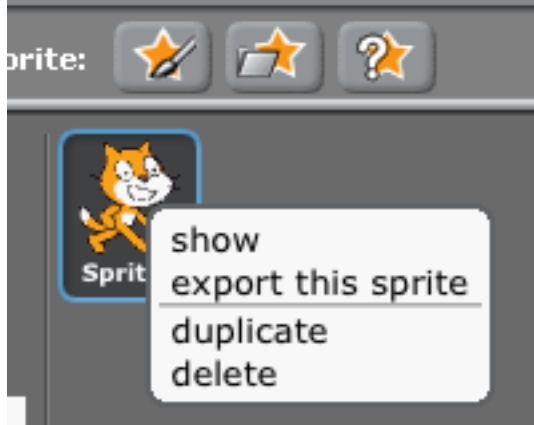


Pong Instructions

1. Create FallingBall Sprite

- a. Delete cat sprite by right clicking on cat sprite and selecting the delete option.



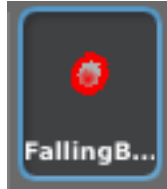
- b. Use “Paint New Sprite” icon (Star with paintbrush) to create the FallingBall sprite.



- c. Create a round sprite of about 4 squares and any color you want. Name this sprite “FallingBall”.

2. Create a script for the FallingBall sprite

- a. In the xxx window, click on the FallingBall sprite image.



- b. Drag a “When (green flag) clicked icon into the Scripts



window.

- c. Drag in the show icon from Looks and attach it to the when green flag



clicked button.

- d. Drag in the Go to x: <> y:> instruction from Motion and attach it to the



show instruction.

- e. For the x: value, use the “pick random” from the Operators group of actions set the range from -10 to 10 and set y: to 163.



- f. From the Control, drag in the wait and attach it under the go to that you set up.



- g. Test this script by clicking on the green flag in top right corner. If your sprite shows up in the top of the screen continue on, if not review your work.



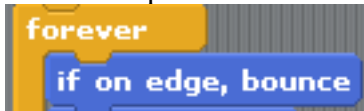
3. Create a block to move the FallingBall and bounce it if it hits the edge.
- a. Drag in a new when green flag clicked block into the Scripts section.



- b. Create a forever loop by dragging the forever instruction from Control.



- c. Drag in the if on edge, bounce instruction from Motion and insert it in the forever loop.



- d. Drag in the move 10 steps instruction from Motion and locate it under the if on edge, bounce instruction.



Change the move to 5 steps.


- e. Test that the ball drops through the window by clicking on the green flag.
4. Set up the dead zone at the bottom of the stage. (If the ball hits this area, the game is over.)

- a. Click on the stage that is to the left of the FallingBall icon.

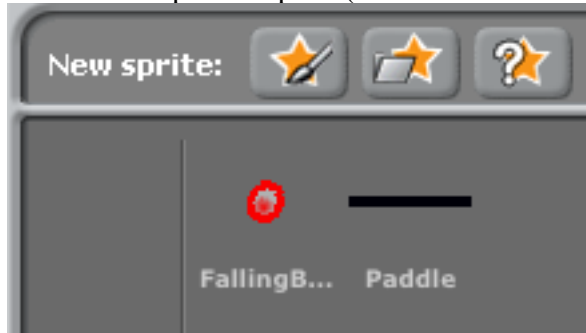


- b. Click on Backgrounds that the top of script area.

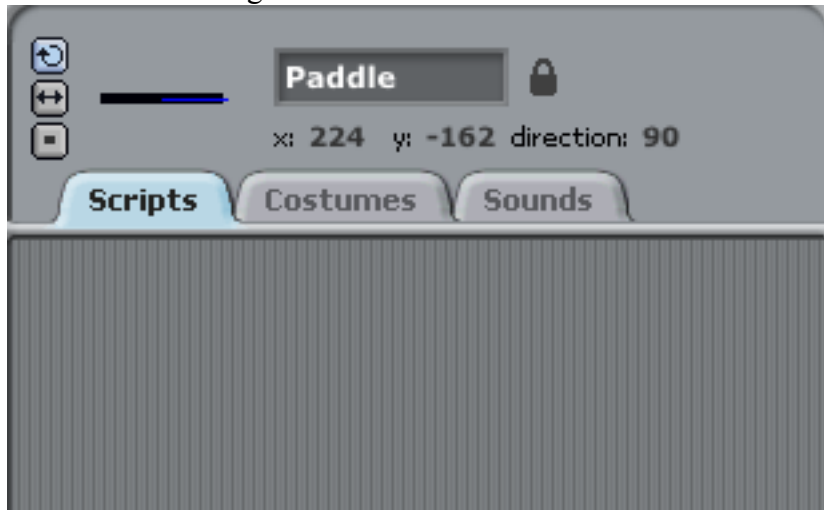


- c. Create a gray edge that you can see horizontally across the entire bottom of the stage.
5. Create a paddle sprite just above the gray area that will be used to bounce the ball.
 - a. Click on the Paint new sprite icon (the star with paint brush)

 - b. Create a black horizontal line (for the paddle) just above the gray area in the stage. Make this paddle sprite about 8 squares long and one square high.
 - c. Save the sprite with the name "paddle".
6. Make the paddle sprite move using the mouse.

- a. Click on the paddle sprite (in the xxx window under the main stage).



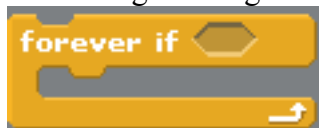
- b. In the sprite window (for the paddle sprite) drag in the when (green flag) clicked block from Control.
 - c. Attache a forever instruction from Control to the when green flag clicked instruction.
 - d. Drag in the set x to instruction into the forever loop.
 - e. Drag in mouse x from Sensing and add it to the set x to instruction.
 - f. Click on the green flag to start the action and move your mouse left and right to verify that the paddle moves.
7. Bounce the ball off the paddle
 - a. Click on the FallingBall icon in the xxx window



and create a new action by dragging in a new when green flag clicked action.



- b. Create a forever if loop by dragging in a forever if action and attach it to the when green flag clicked action.



- c. In the forever if icon add the touching action from Sensing. Choose the FallingBall sprite for the touching instruction.



- d. Add the point in direction instruction (from Motion) and add it to the forever if loop.



- e. In the point in direction, add the subtract action from Operators
- f. In the subtraction operator, make the first element 180 and drag direction from Motion. This instruction will send the ball back in a new direction when it hits the paddle.
- g. Drag in the move instruction from Motion and make its value 3.



- h. Attach the turn instruction from Motion and use pick random from the operators for the number of degrees that you want turned. Use a range from -25 to 25.



- i. Test that the ball bounces off the paddle.

8. Sensing the end of the game (when the ball hits the gray area at the bottom of the stage).

- a. In the block that sets the FallingBall location that you create in xxx, drag in a wait until from Control and attach it under the wait instruction.
- b. Add the touching color instruction from sensing. Click on the that square and use the eye dropper to select the gray from bottom of the stage.



- c. Add hide (from looks) under wait until.
- d. Add stop all from Control.

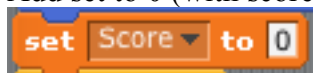


- e. Add show under when (green flag) clicked.

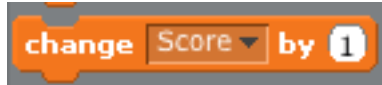


9. Create a score variable. This will increase each time the Paddle his the FallingBall.

- a. Click on Make a variable in Variable and name it score.
- b. Add set to 0 (with score) between the go to x: and wait 1 secs instruction.



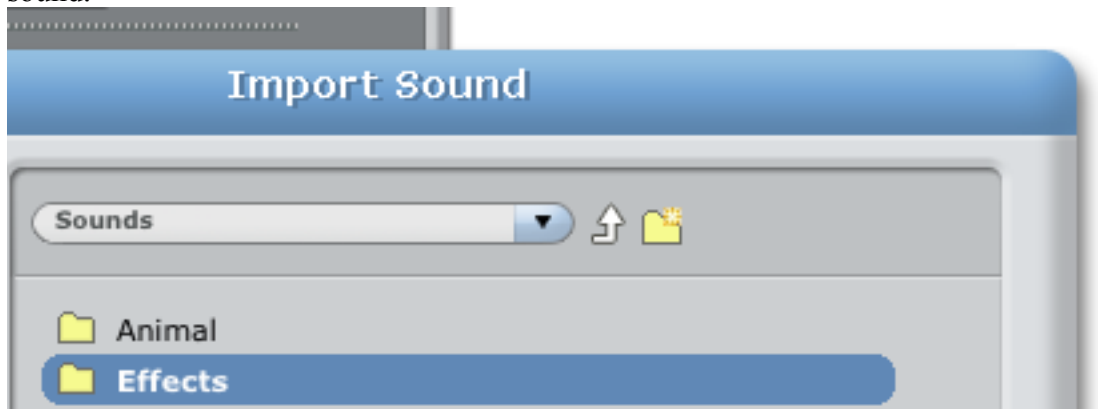
- c. Add change (Score by 1) between the point in direction and move 3 steps instruction.



- d. Run the script to test that the variable increases.
10. Add a sound when the FallingBall hits the paddle.
- a. Click on Sounds in the FallingBall sprite window.
 - b. Click on import to get a sound.



- c. Double click on effects and choose a sound and hit OK to choose the sound.



- d. Drag in the play sound instruction from Sound and add it to the top of the forever if loop (above the point in direction instruction).



- e. In the play sound instruction, choose the sound that you selected.
- f. Play the game to test the sound.