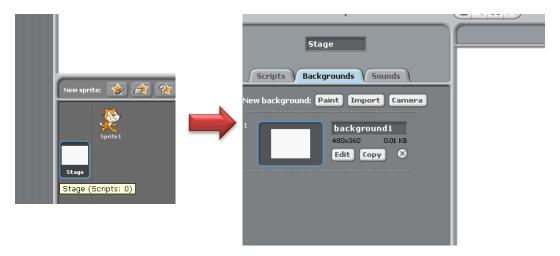
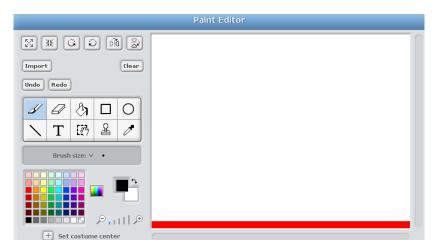
PING PONG GAME: Step-by-Step Tutorial

- 1. Open a new Scratch Program
- 2. Create the Background (STAGE)
 - Click on Stage



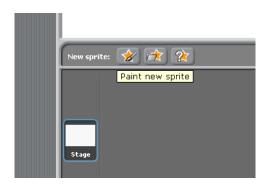
- CLICK on the Background tab.
- Click Edit.
- Add a RED bottom to the White Screen (or add your own touches as you like) using the Paint Brush. I did this by drawing a red filled rectangle at the bottom.

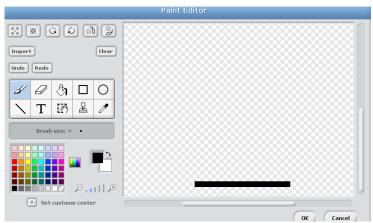


- Click OK to close the Paint Editor
- 3. Delete the Cat sprite (Right Click on the Sprite and select Delete).

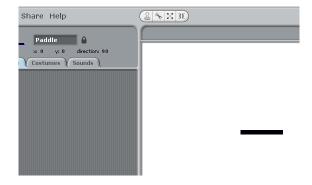


4. Add a new Sprite – this time Create your own Paddle

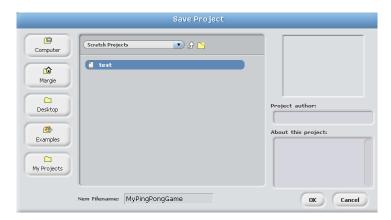




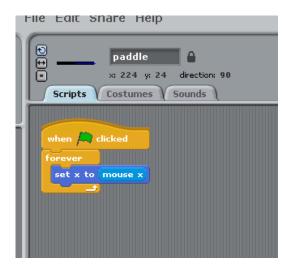
- A simple Black line/rectangle will do the job nicely!!
- Click OK.
- Now give it the name "Paddle"



5. Probably a good time to Save your work if you have not already – Go to File -> Save as...



- Do add some information in "About this project" regarding your project to explain it to others.
- 6. Now it's time to add some code...to your paddle sprite.



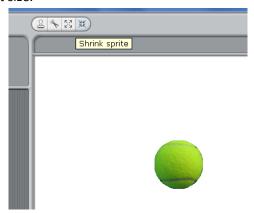
- Now Test your code.
- Click on the Green Flag and see what happens when you move the mouse. This code makes the paddle follow your mouse horizontally (x axis only).
- 7. Now it's time to add the ball.
 - You can choose to create your own similarly to how you created the paddle only draw a circle and design your ball as you so wish.
 - Or select a ball from the sprite images available as follows:



• In the "Things" folder you will find a selection of balls you can choose from.



You will probably need to resize your ball
 Select Shrink Sprite – then move the mouse over the ball and left click until the ball is at the correct size.



8. Now add some code to your ball:

```
when clicked

go to x: -21 y: 51

wait until touching color ?

stop all
```

- To set the Colour in <touchingcolor> hold the mouse over the coloured square
 until the dropper icon appears move the dropper over the colour that you
 want and click the left mouse. In this case you hold the dropper over the bottom
 red line on the stage and click the left mouse.
- The above piece of code positions the ball at the start of the game and stops the game if the ball touches the base line of the stage.
- Now add the code below:

```
when clicked

forever if touching paddle ?

play sound water_drop v

point in direction 180 - direction

move 5 steps

turn v pick random -20 to 20 degrees

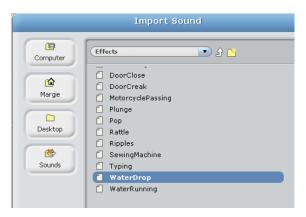
when clicked

forever

if on edge, bounce

move 4 steps
```

• To add the **water_drop** sound click on the Sounds Tab on your Ball Sprite. Go to Import and select the water_drop sound from the Effects Folder.



9. You will need to adjust the angle of the ball. This will determine how the ball moves across the screen. You can adjust this to make the game easier/harder.



Now you are ready to play!!!

Suggestions for further work

- 1. Change the speed of the ball
- 2. Change the background and colour of the base line.
 - Change the code to suit.
- 3. Add a Paddle on the Top?
- 4. See what happens when you adjust the angle of the ball.
- 5. Have fun!!

Reference:

This tutorial is based on the game "Pong" which is installed as part of the Scratch installation in your Examples folder.