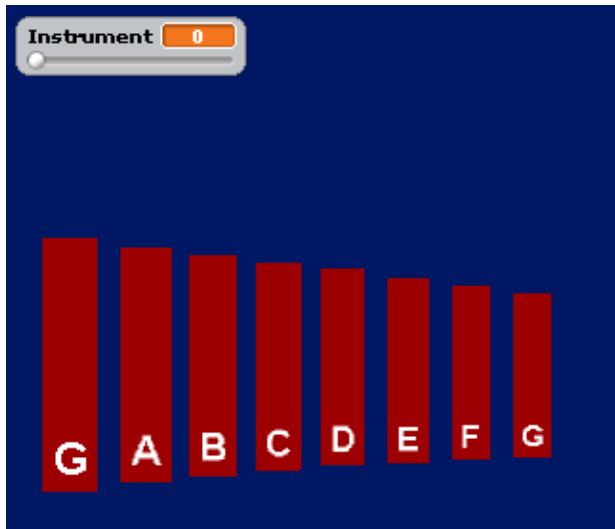


Directions for Creating a Virtual Xylophone in Scratch



1. Start Scratch. Delete the Cat.
2. Create a Variable Called "Instrument"
 - a. Click Orange Variable Block
 - b. Click "Make a variable"
 - c. Type "Instrument"
 - d. Click "OK"

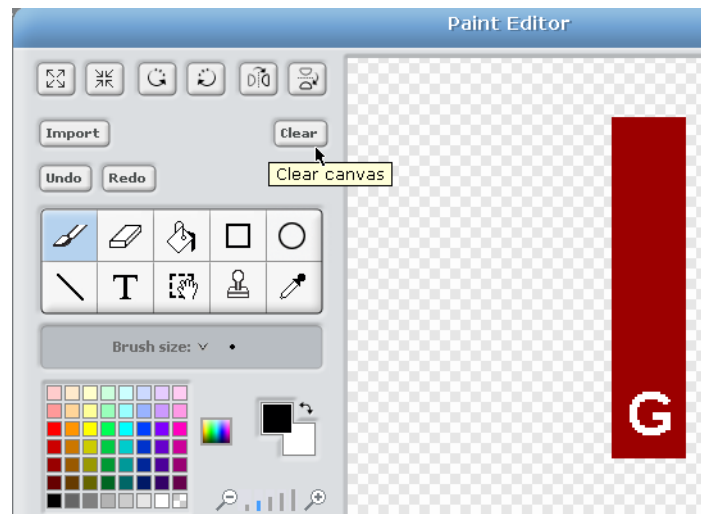


3. Double Click on Instrument Variable to add the variable to the output screen. Right-dick the variable on the screen and select "Slider". (You can use this to change instrument sounds in your

program.)



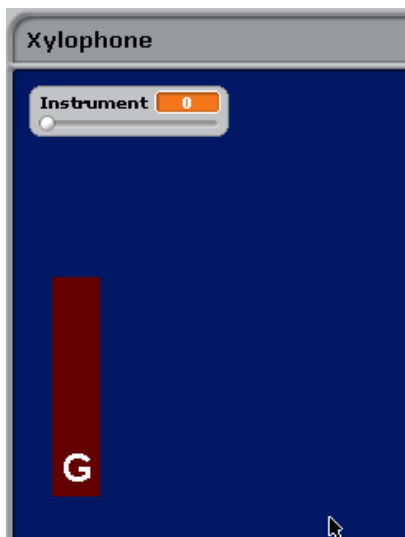
4. Click Paint a New Sprite.
 - a. Draw a Large Rectangle and fill with a color.
 - b. Use text tool and put a "G" in the lower part of the "Bar."
 - c. Click OK
 - d. Name this Sprite "LowG"



5. Click "Costumes" Tab on "LowG"
6. Click "Copy"
7. Click "Edit" on "costume2"
8. Use Flood Fill to make the bar a darker colour.



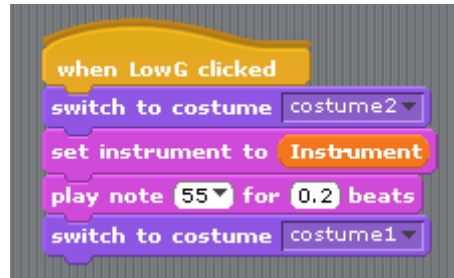
9. Click "OK"
10. Click on "Stage"
11. Click on "Backgrounds" Tab.
12. Click "Edit"
13. Flood Fill the stage so it is a solid color.
14. Click Ok



16. Add This Script to the "LowG" Sprite



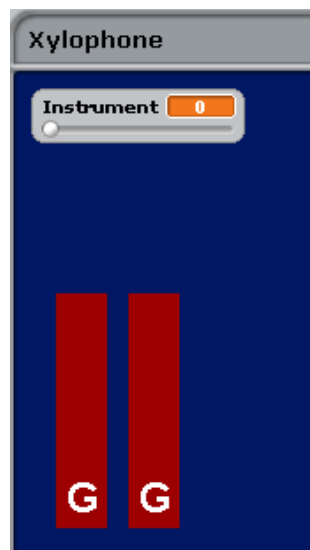
17. Add this Script to "LowG" Sprite (to play when clicked)



18. Add this Script to "LowG" Sprite (to play when 1 key is pressed)



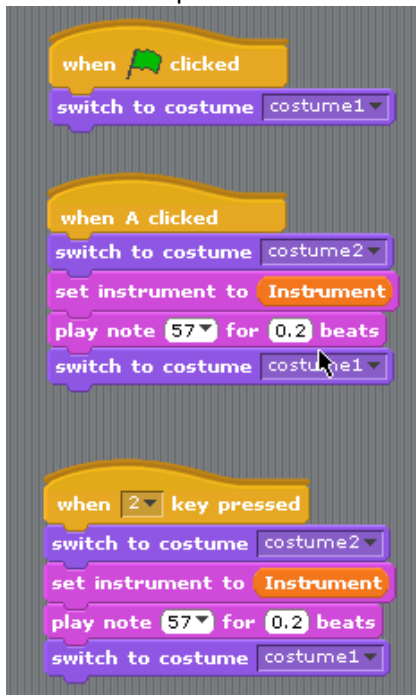
19. Click the Green Flag and Test - it should play 1 note
21. Use stamp tool to copy the "LowG" Sprite



22. Make the Following Changes to new Sprite:

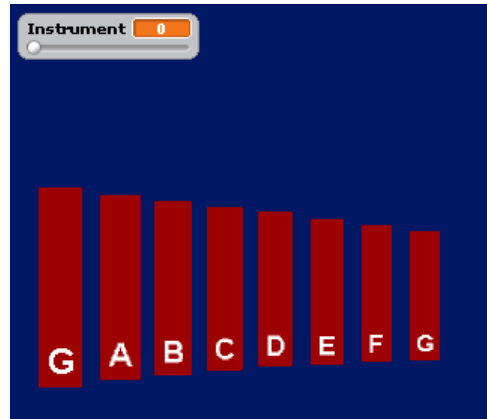
- Use Shrinker Tool to make it smaller
- Change its name to "A"
- Change the "play note" to 57 (Pitch name A) in when clicked
- Change when 1 key pressed to when 2 key pressed
- Change the "play note" to 57 (Pitch name A) in when 2 key pressed
- Edit the Costumes so "A" is on the Bar

23. Finished Script for A Bar should look like:



24. Click the Green Flag and test the scripts. You should be able to play two pitches.

25. Use the copy tool and create the rest of the Xylophone. The finished stage should look like



26. Modify the scripts so the xylophone can play all eight notes. You should now be able to play "Mary had a little lamb":

B A G A B B B

A A A B D D

B A G A B B B

B A A B A G