Boolean Girl Full STEM Ahead Episode 10: Scratch Game Building

Before we begin, Open Scratch

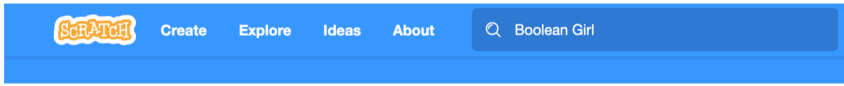
On a Boolean Box

1. Look for the folder " Scratch Courses Boolean Girl
2. Double click to open it
3. Open the folder 5 – Games
4. Double click on 3-Pong1.sb

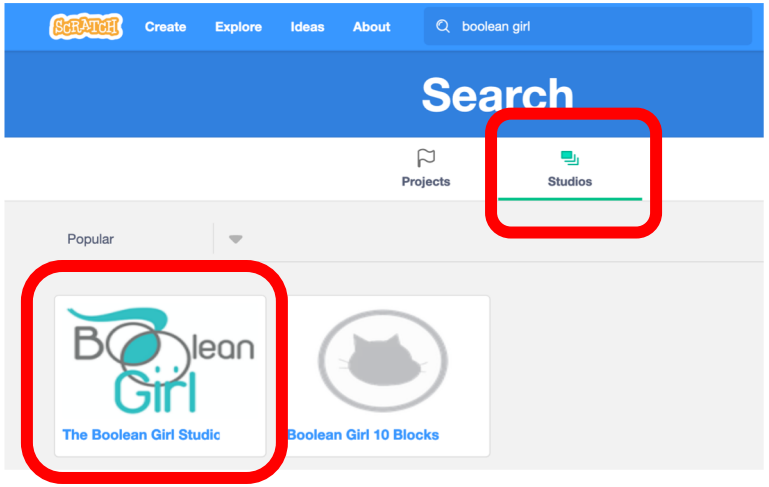
On the web: bit.ly/39AyqRD

OR

1. On the web go to: https://scratch.mit.edu/



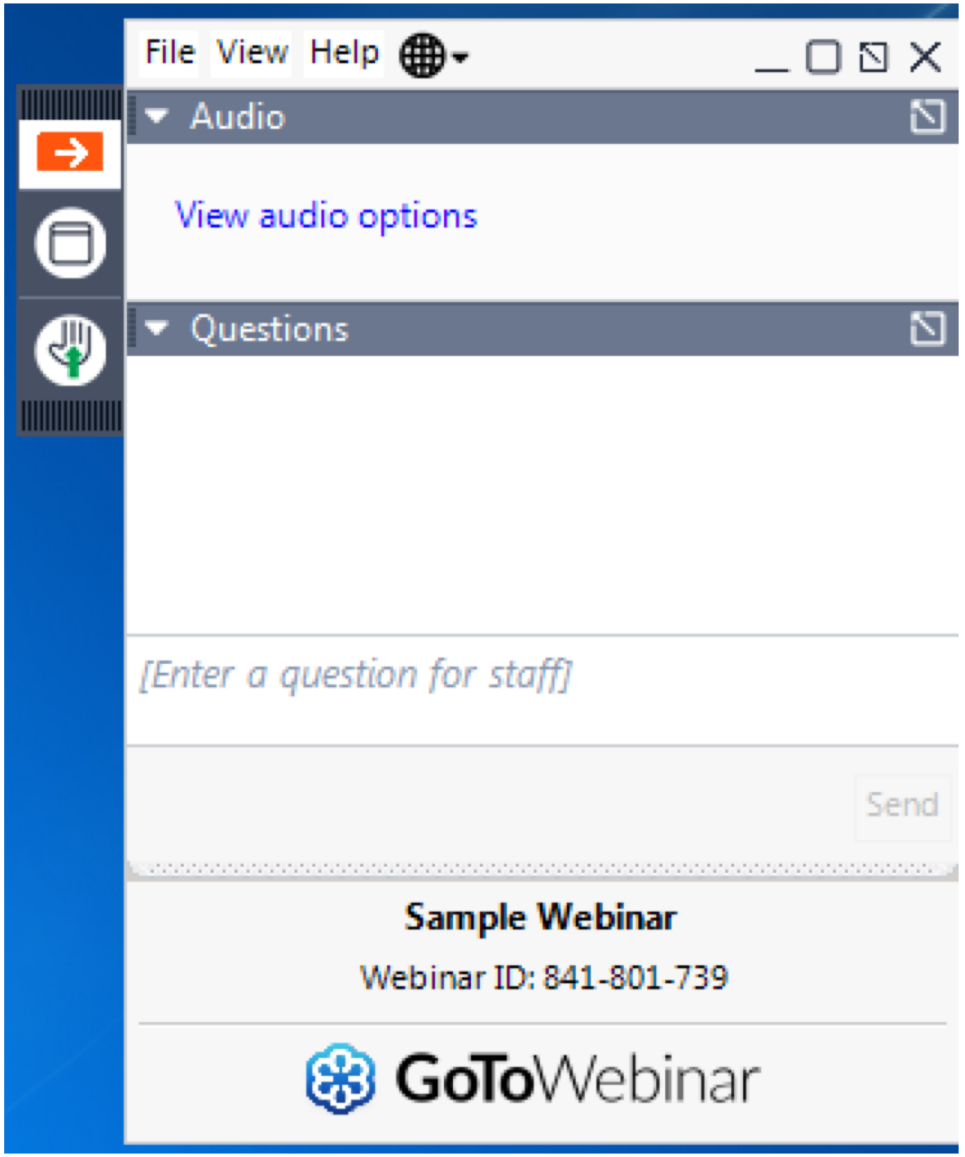
3. Open the Boolean Girl Studio



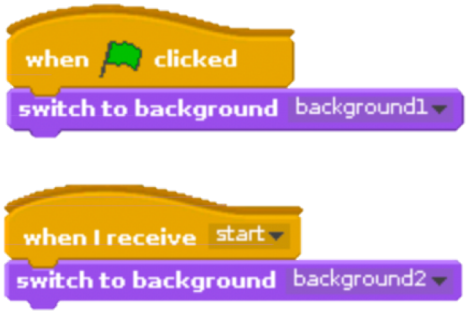
4. Open Boolean Girl Pong1

Raise Hand

Ask Question



1) Create 3 backgrounds



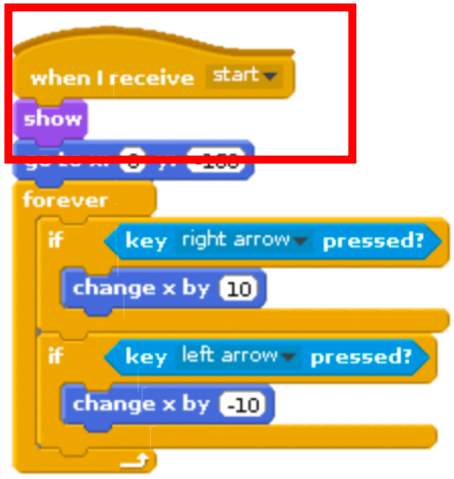
2) Add a Start Button Sprite

3) Update other Sprites

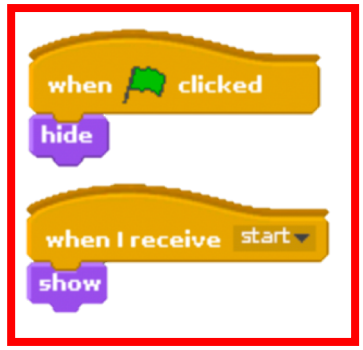
Paddle

Use **When Green Flag Clicked** to Hide

Add **When I Receive** to start the game

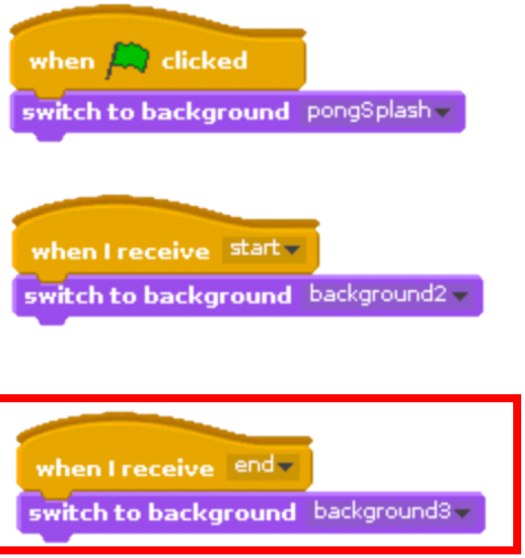


Bottom

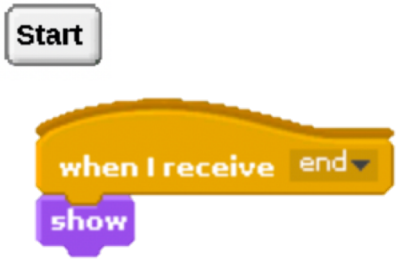


Ball

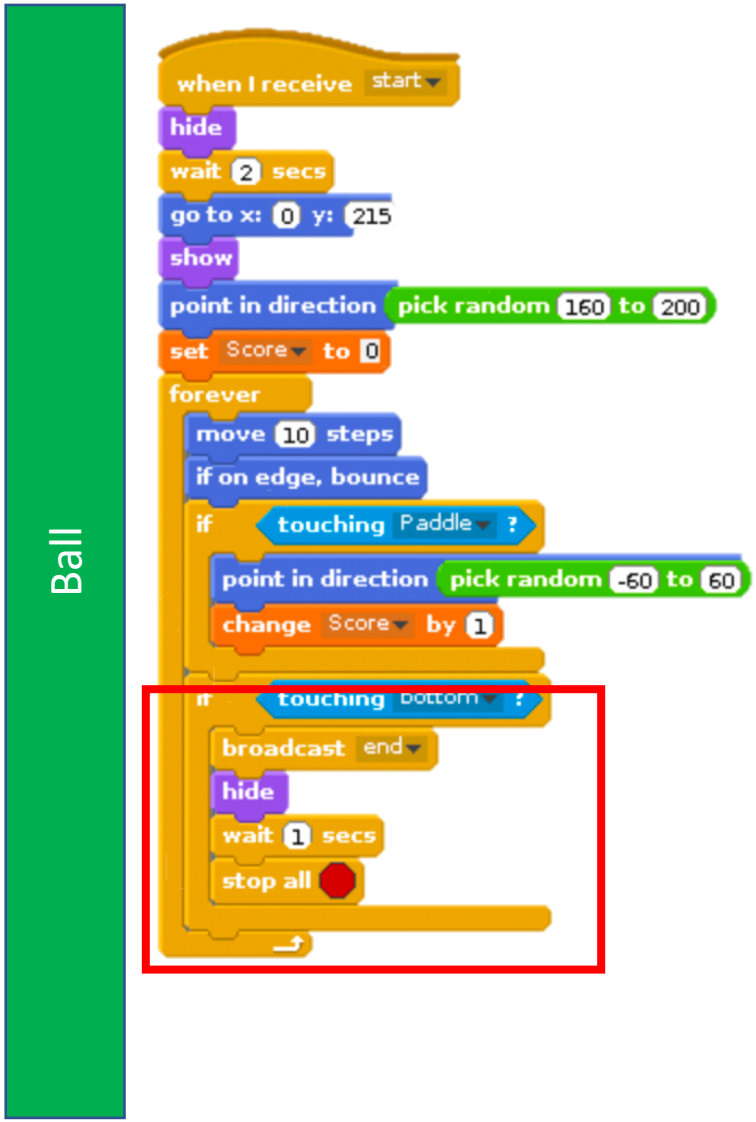
1) Add End Background



2) Add end code to the Start Button Sprite



3) Update the Ball Sprite



Most games begin with a "Press Start" Screen

In this example the player must click a button to start the game. Simple instructions are provided. You can also provide other details like history, high scores, or different difficulties.

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CREATE A PRESS START SCREEN

HOW TO … Start a game

Start

Add sprites and backgrounds

Starter Code Samples

Create a background

Add a Start Button Sprite

Update the rest of the game

On each Sprite, replace **When Green Flag Clicked** with When I receive Start

Use **When Green Flag Clicked** to hide the sprite

Try it

Click the green flag to start

Tell the play when the game is over. Ask if they want to play again.

With a new background and a few code changes you can add a better ending to a game.

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BUILD A GAME OVER SCREEN

HOW TO … End a Game

Start

Add one new background

Starter Code Samples

1) When the game ends, switch the background:

2) Update other Sprites as needed.

3) Update the end of game conditions to Broadcast the END!

A wait might be needed to give the code time to run.

Try it

Click the green flag to start

Resources

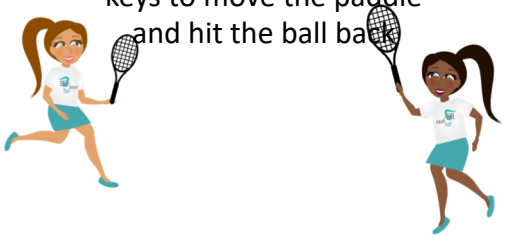
- Online version of the project is: bit.ly/39AyqRD
- Replay, sample code and handouts will be at:

https://booleangirl.org/full-stem-ahead/past/

Challenges

- Update your own game adding some features from today.
- Search Scratch for inspiration for a new game.

https://booleangirl.org

Welcome to PONG!

Use the right and left arrow keys to move the paddle and hit the ball back