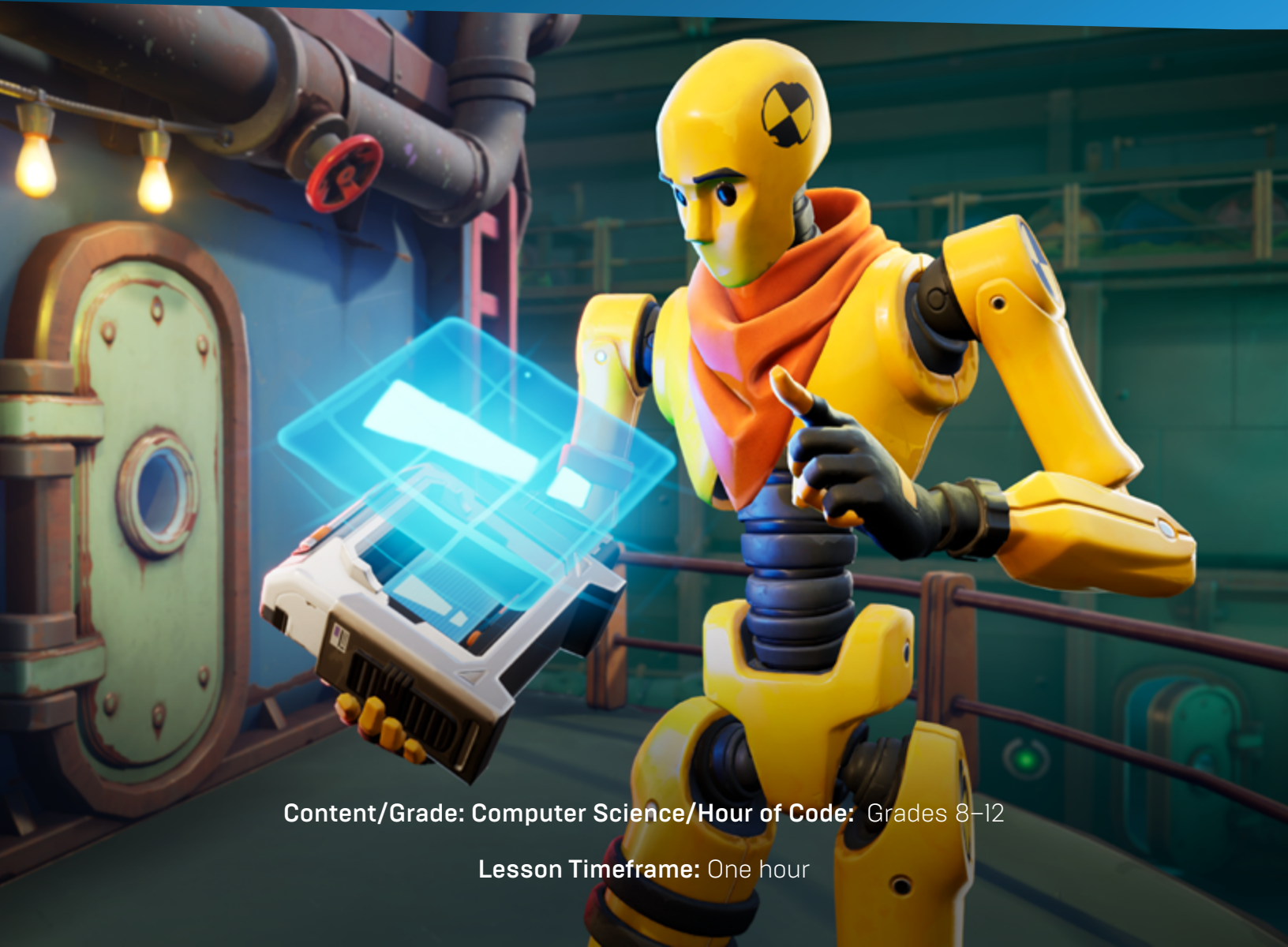


FORTNITE

CONDITIONAL STATEMENTS: USING THE LOCK AND KEY IN FORTNITE CREATIVE



Content/Grade: Computer Science/Hour of Code: Grades 8–12

Lesson Timeframe: One hour

Overview

Did you know you can learn computer programming concepts in Fortnite Creative? Well, you can!

"IF you finish your vegetables, THEN you can have ice cream." Have your parents ever uttered a statement like this? In coding, we call that a conditional statement. If the condition is met, the result is activated.

In this activity, students will create a lock-and-key game mechanic where the player has to find a key to unlock a door that allows the player to advance in the game.

Let's get started!

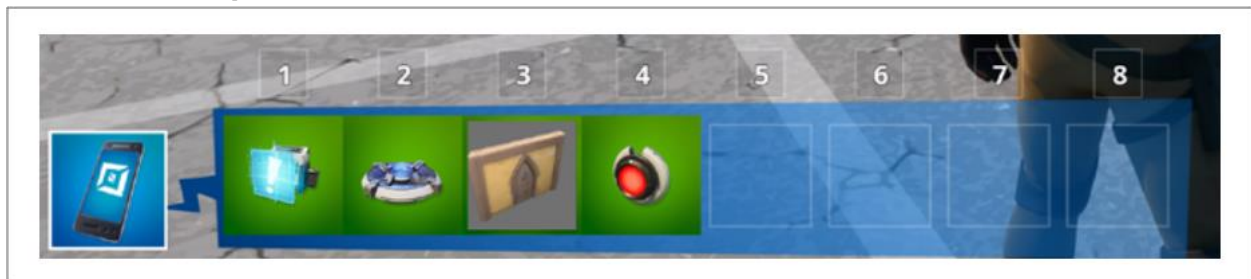
If you need a review on creating your island, refer to the [Getting Started Guide](#)

What you need



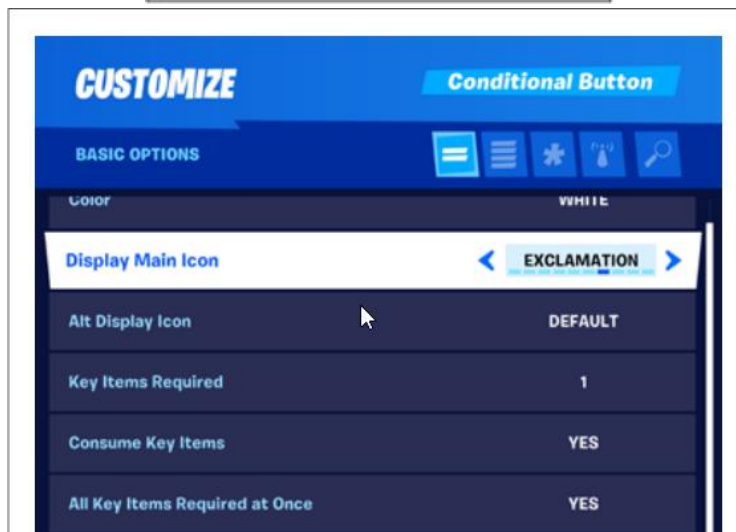
Step 1

From the Creative Inventory, equip the **Conditional Button**, **Item Spawner**, **Door**, **Lock Device**, and **Slurp Fish**.



Step 2: Place and Customize the Conditional Button on Your Island

Place the **conditional button** on your island.



For this exercise, you should customize it based on the settings above.

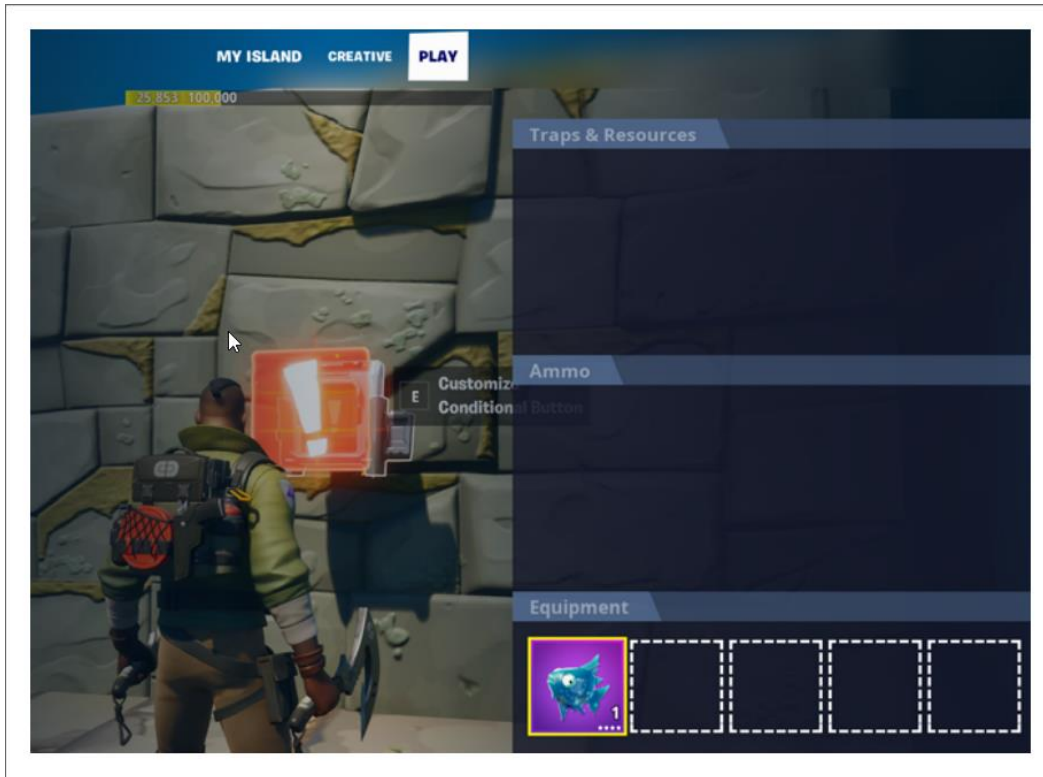
Note that **Key Items Required** is set to 1. This means you will need 1 of the required items to activate the button. If you want to require multiple items, you can change the number required.

In this example, you will use the slurp fish as the **key** to activate the conditional button. To indicate that you will use a slurp fish, you must load the conditional button with a slurp fish.

To do this, go to your inventory, and at the top of the screen, change the view from **Creative** to **Play**. When you go to the Play view, you will see the slurp fish that you equipped.

Click and drag the slurp fish on top of the button from the inventory.

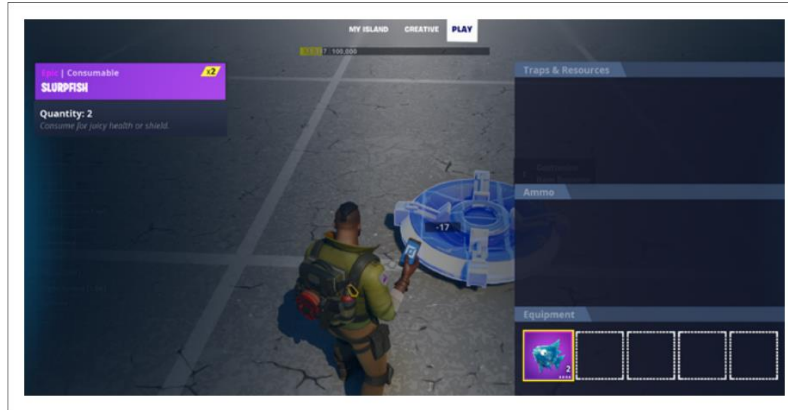
It should show it as registered, and you will see the button alternate from an exclamation point to the slurp fish, indicating that you need the slurp fish to activate it.



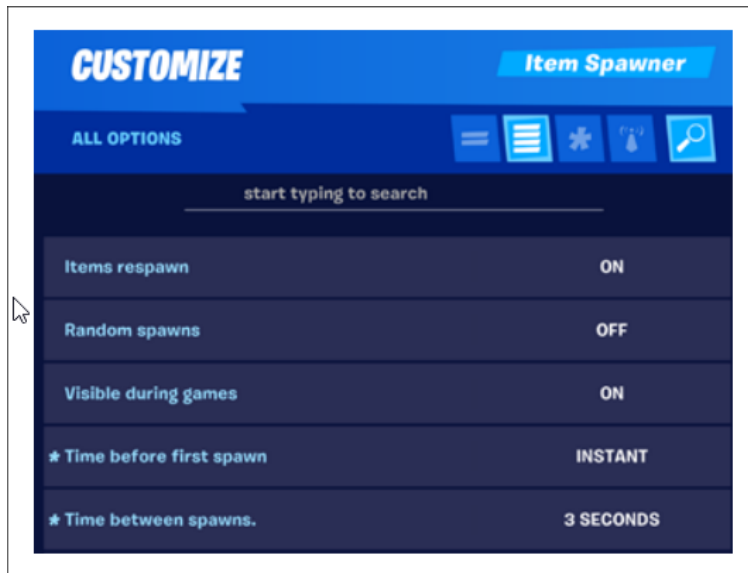
Step 3: Place and Customize the Item Spawner on Your Island

Place the **item spawner** on your island.





* For testing purposes you can put them right next to each other, but you will likely want to make the player have to find the item (key) somewhere on the island to activate the button and unlock a door (or initiate another action).



For this exercise, set the **Time before first spawn** as Instant and the **Time between spawns** as 3 seconds. This means that the first item will automatically spawn at the start of the game, after one is taken, another will spawn 3 seconds later.

You can also choose to have only one item spawn, and adjust the time so that it doesn't spawn immediately, or change time between spawns to **never, immediate**, or another time of your choice.

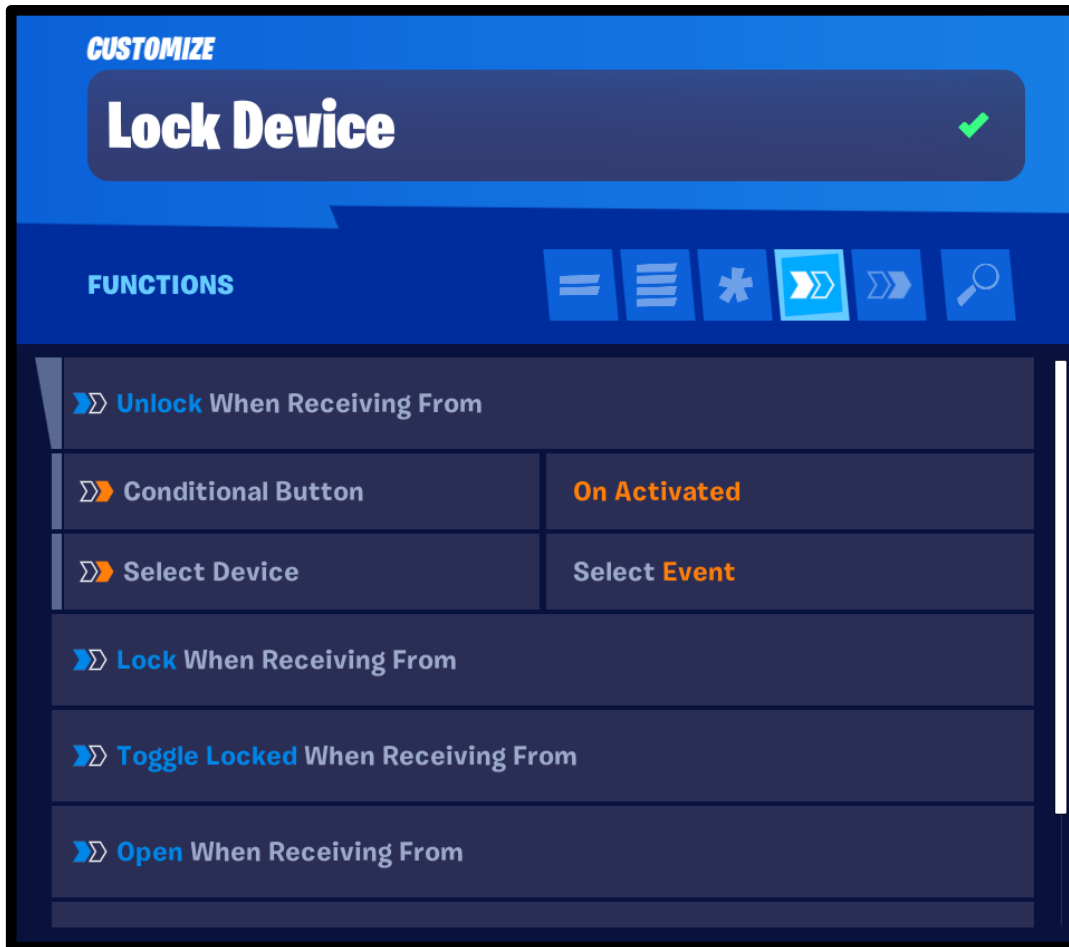
Step 4: Place a Door on Your Island

Place a **door** in the world. Again, for testing purposes, we can put the door next to the button and item spawner, but in your game you can place the door wherever you like.

Place the lock on the door. Make sure the button on the lock faces the right direction, and the grid snap is set at a reasonable number to allow you to place the button where you would like.

Step 5: Coding the Lock

Now you need to set the lock to receive that signal so that when the conditional button is activated, the door is unlocked. When you go to the settings to customize the Lock Device, indicate that it should unlock when the conditional button is activated in the functions section.



Step 6: Put It All Together

To create this lock and key system, you created a button that required a slurp fish to activate it. The item spawner was set up to automatically spawn a slurp fish. The player must collect the slurp fish to activate the button. The idea behind the button is that when it is activated, it sends a signal to the lock to unlock—and voila! —the door unlocks and you can enter.

Activity

Now you understand how this works, integrate the idea into your game world. Create a “**find the key**” puzzle. The player should have to explore the island to find the key in order to open the door to complete the puzzle.

Extension Activities

- Set it up so the player needs to find a number of items that you have hidden in the world (such as 10 gold coins) to unlock the door.
- Create a puzzle that requires different keys to open different doors in order to make it through a short maze.

Good luck, have fun!

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