

coding

4 MIGRANT WOMEN RETURNERS

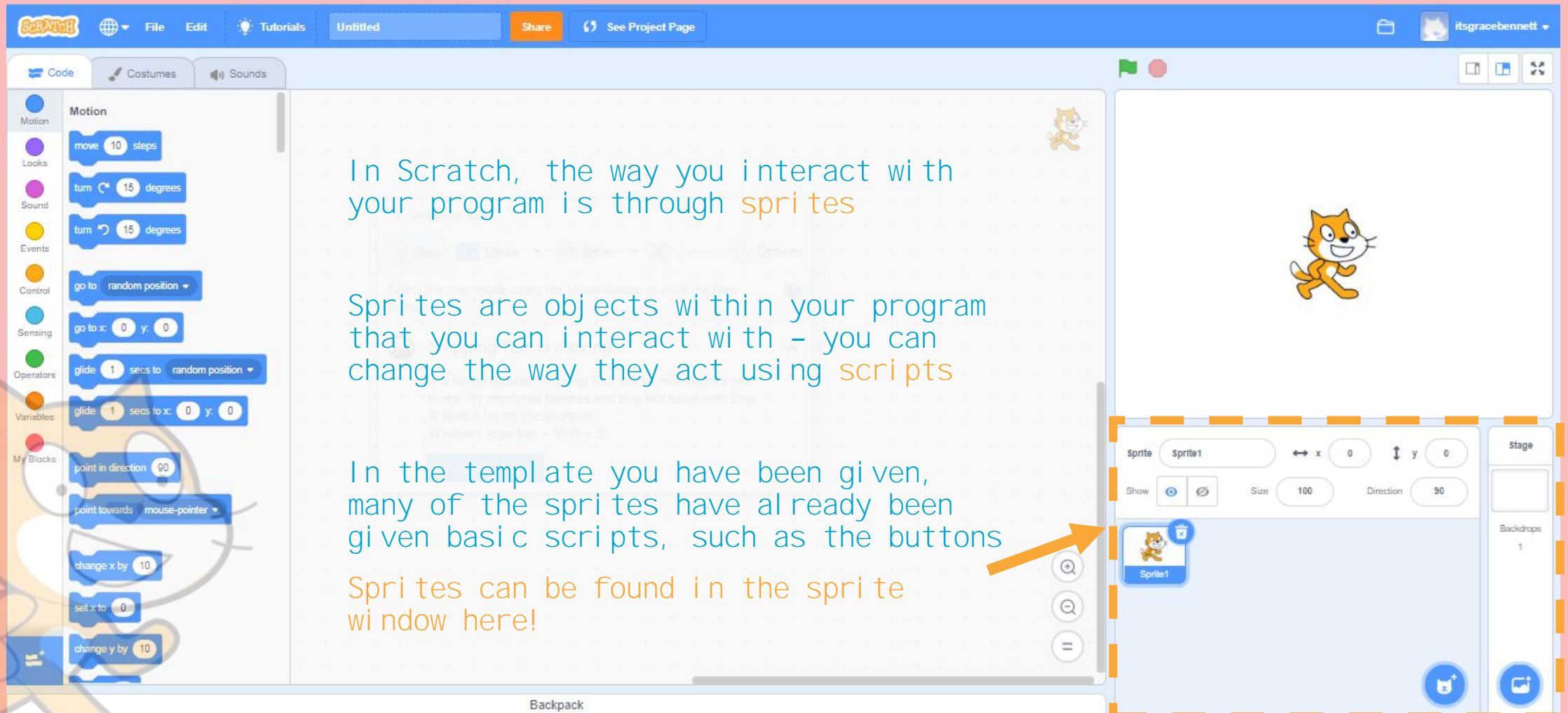


Hotel and Restaurant Management Software

BEGINNER

4 MIGRANT WOMEN RETURNERS

How does SCRATCH work?



In Scratch, the way you interact with your program is through **sprites**

Sprites are objects within your program that you can interact with – you can change the way they act using **scripts**

In the template you have been given, many of the sprites have already been given basic scripts, such as the buttons

Sprites can be found in the **sprite window** here!

How does



work?

This is our display window, where our sprites will appear and interact with the user

This is the code section! Here is where we can drag and drop blocks of code.

Blocks are colour coded depending on their function

Sprites can be found in the sprite window here!

The screenshot shows the Scratch IDE interface. On the left is the 'Code' area with a sidebar of categories: Motion, Looks, Sound, Events, Control, Sensing, Operators, Variables, and My Blocks. The main area contains a script of code blocks, including 'move 10 steps', 'turn 15 degrees', 'go to random position', 'glide 1 secs to random position', 'point in direction 90', 'point towards mouse-pointer', 'change x by 10', 'set x to 0', and 'change y by 10'. On the right is the 'Stage' area, which is currently empty except for a small Scratch cat icon. Below the stage is the 'Sprite' area, which shows 'Sprite1' with its position (x: 0, y: 0), size (100), and direction (90). At the bottom right, there are icons for adding a new sprite and a new backdrop.

Activity scenario summary:

In this example we will code a project, which replicates a Hotel Front Desk Management Software System used by staff working at the front desk and in customer service.

Upon completion of this activity the participants would have built a real working software which allows them to

- View Available Rooms
- Create Occupied Rooms List
- Check a customer in & out of a Room
- Make bills for any customer/room
- Add additional services to customer room such as Breakfast, Dinner, Mini bar etc
- View ongoing customer account

The screenshot shows a Scratch project page for a template titled "Hotel & Restaurant Software Template". The project is displayed in a browser window. On the left, there is a vertical menu with buttons for "Check-In", "Check-Out", "Vacant Rooms", "Occupied Rooms", "Book a Meal", "Room Service Orders", "Rooms to Clean", and "Bill". The main area shows a "Hotel Scratch" title and a large icon of a crossed knife and fork. Below the project, there are statistics: 0 hearts, 0 stars, 0 remixes, and 1 view. At the bottom, there are buttons for "Add to Studio" and "Copy Link", and a status of "Unshared".

Hotel & Restaurant Software Template

See inside

Remix

See inside

Hotel Scratch

Check-In

Check-Out

Vacant Rooms

Occupied Rooms

Book a Meal

Room Service Orders

Rooms to Clean

Bill

Instructions

Blank Template

Notes and Credits

How did you make this project? Did you use ideas, scripts or artwork from other people? Thank them here.

0 0 0 1

Unshared

Add to Studio

Copy Link

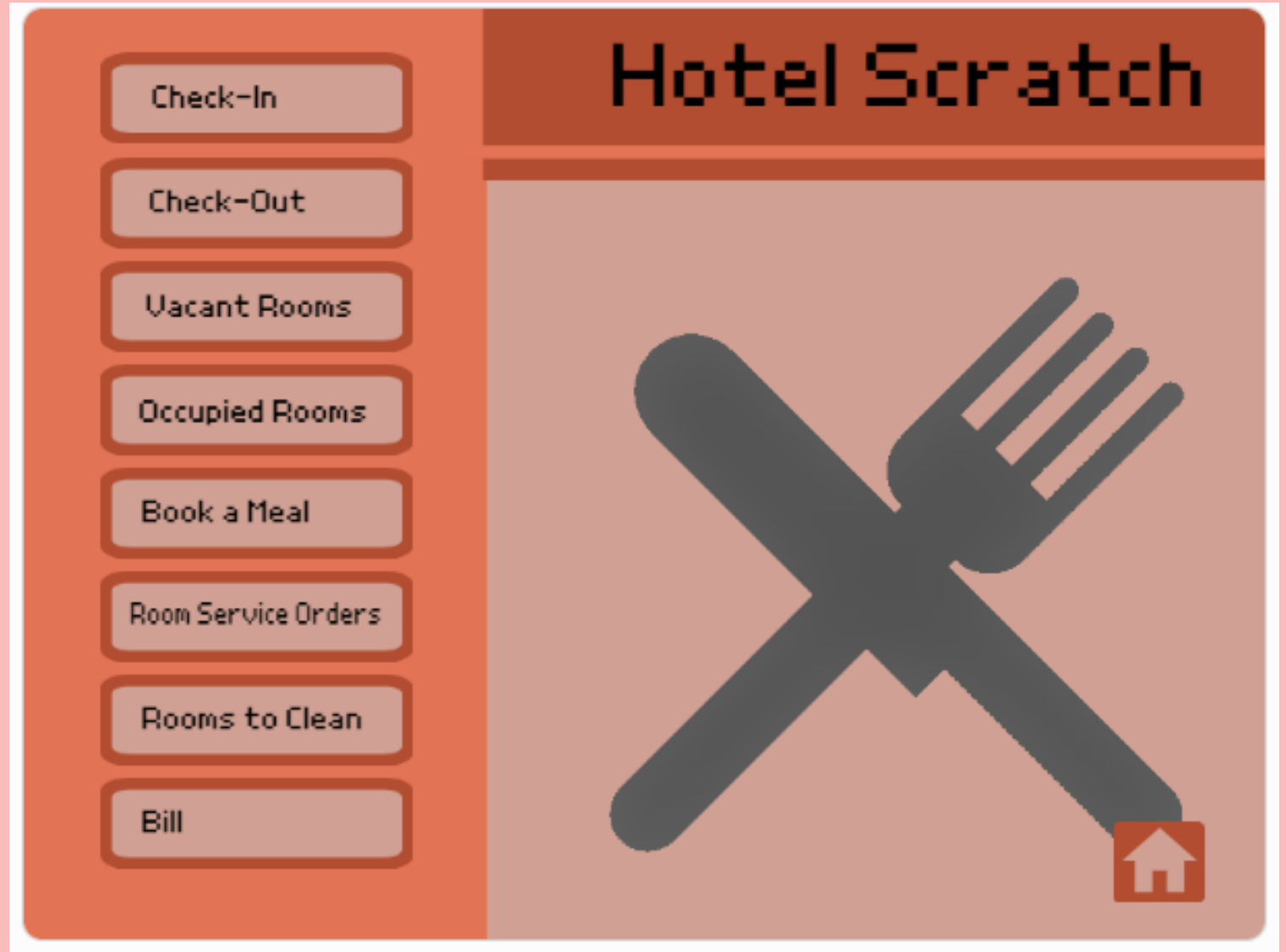
Once you have logged into Scratch...

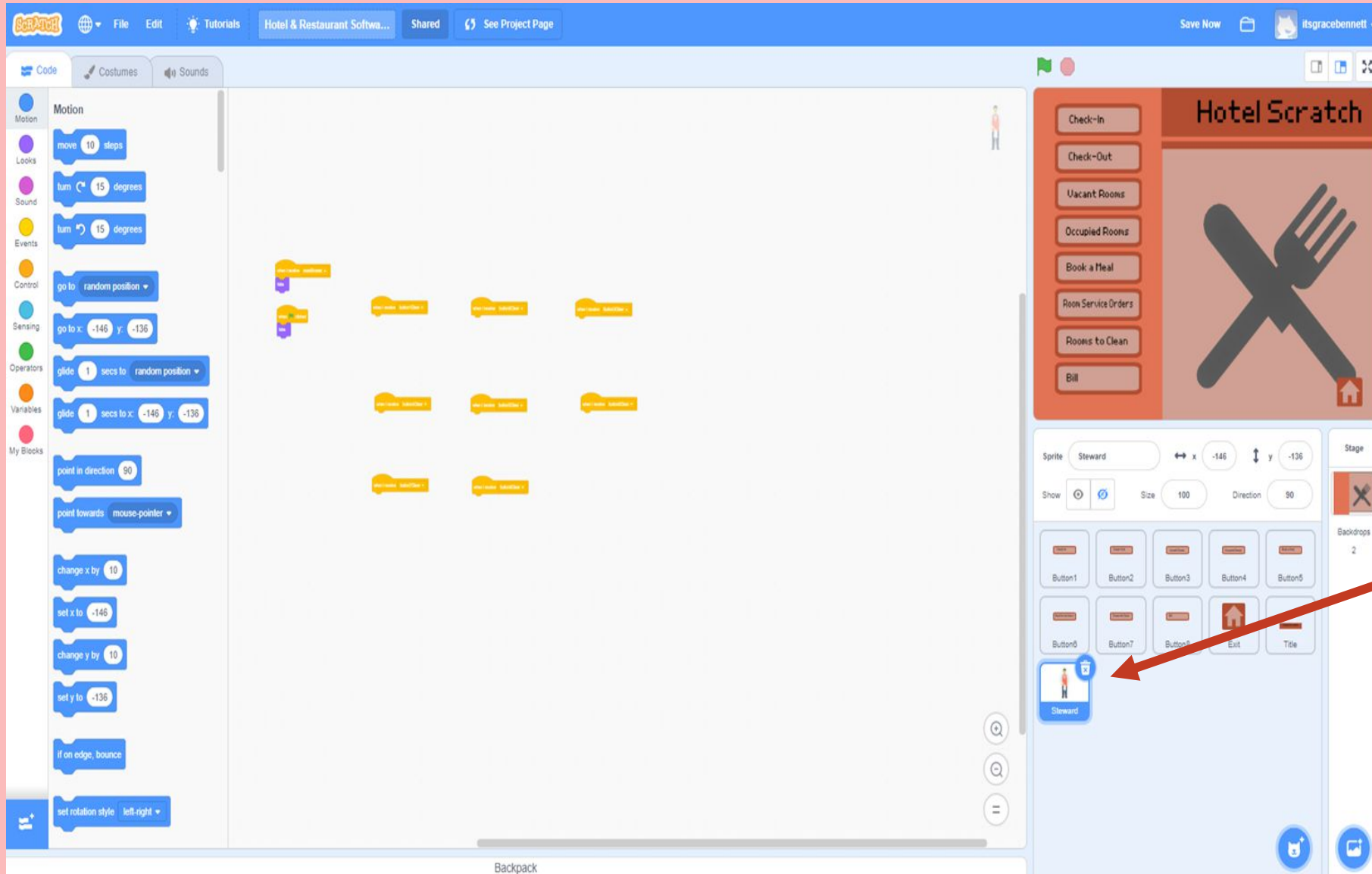
Click <https://scratch.mit.edu/projects/649271982> to access the template to our project!

Click [Remix](#) to get started with your project

The menu:

This is the menu! In the beginner section, we will be adding functionality to the first 4 buttons.

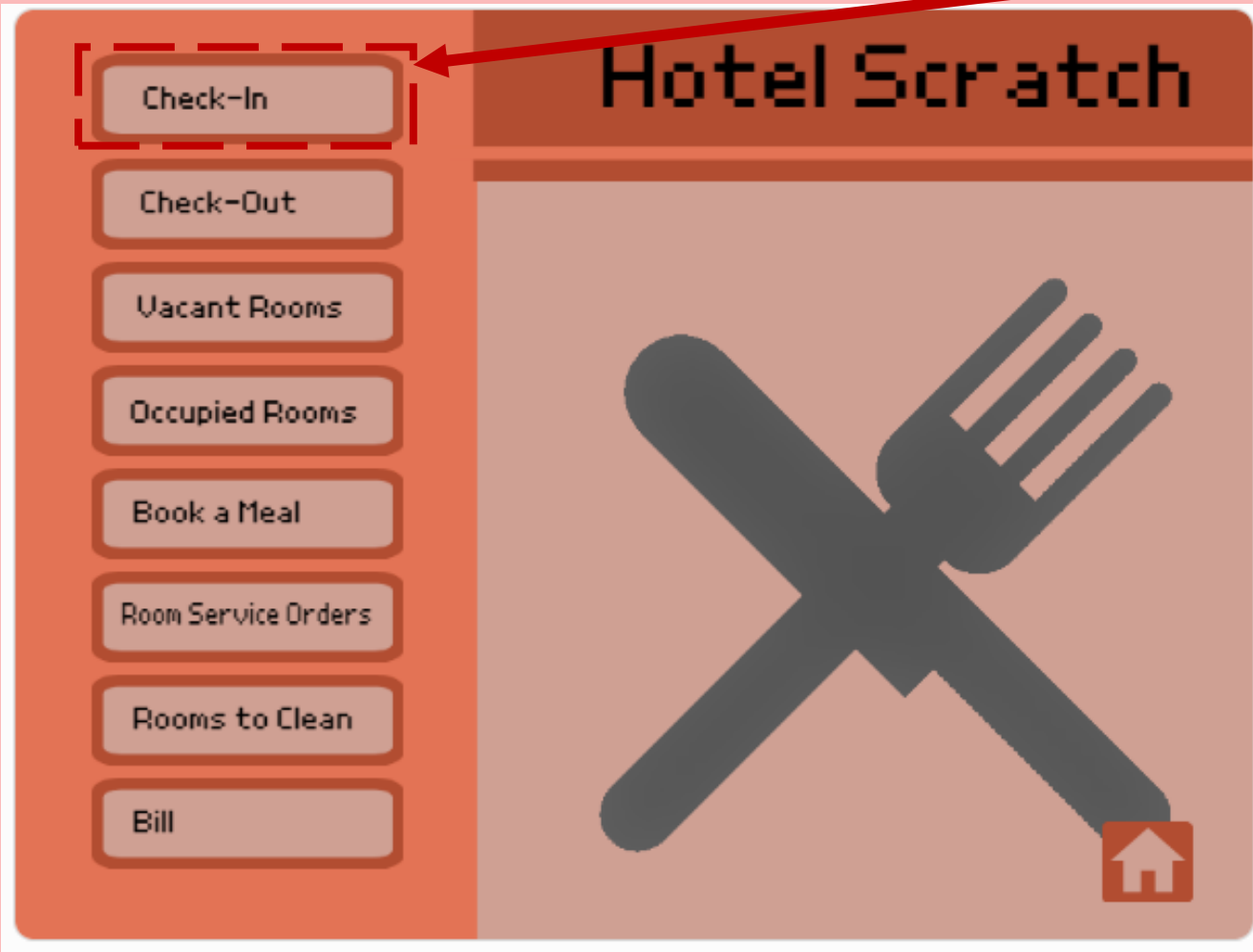




The window should look something like this!

Make sure you have selected the **Steward** sprite.

Check-In

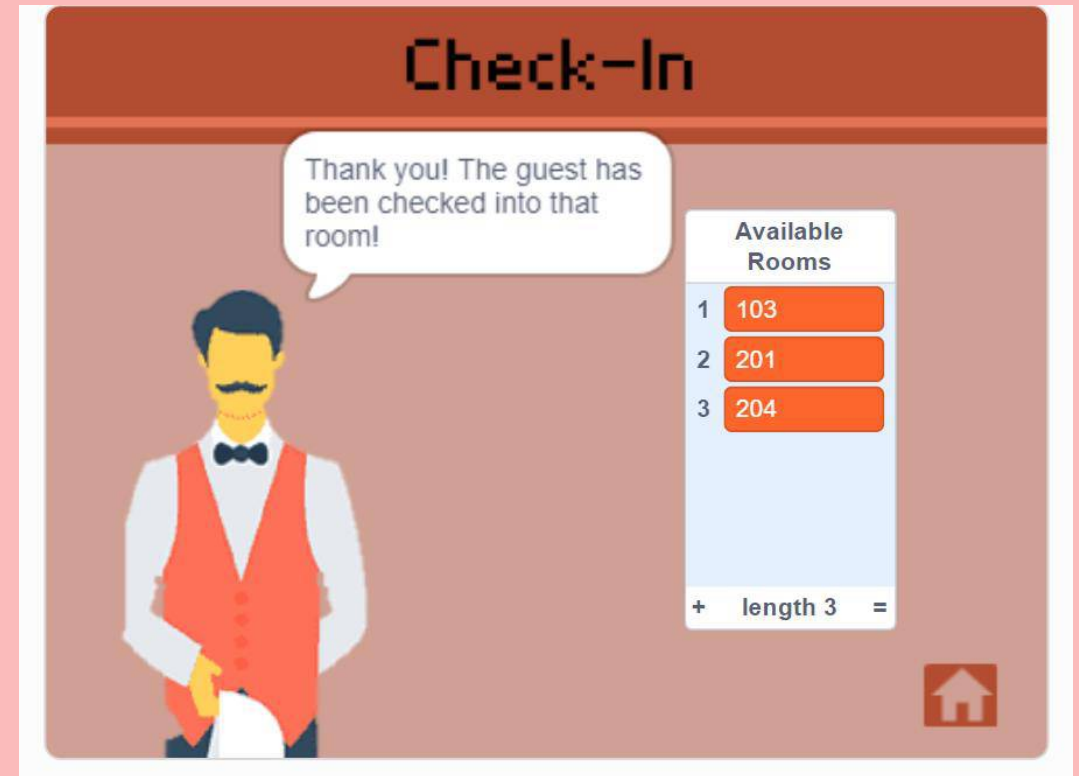
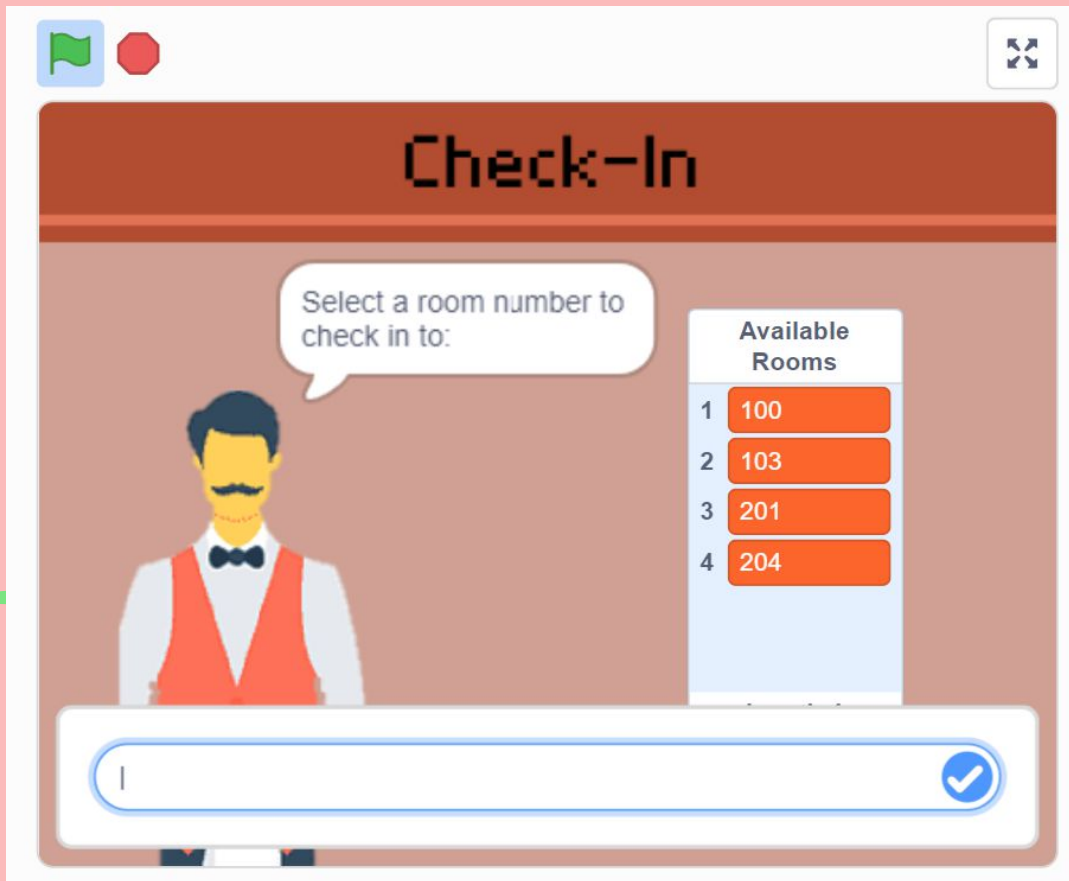


This button will allow the user to check into an available room.

It will show them a list of available rooms and be asked which one they would like to enter.

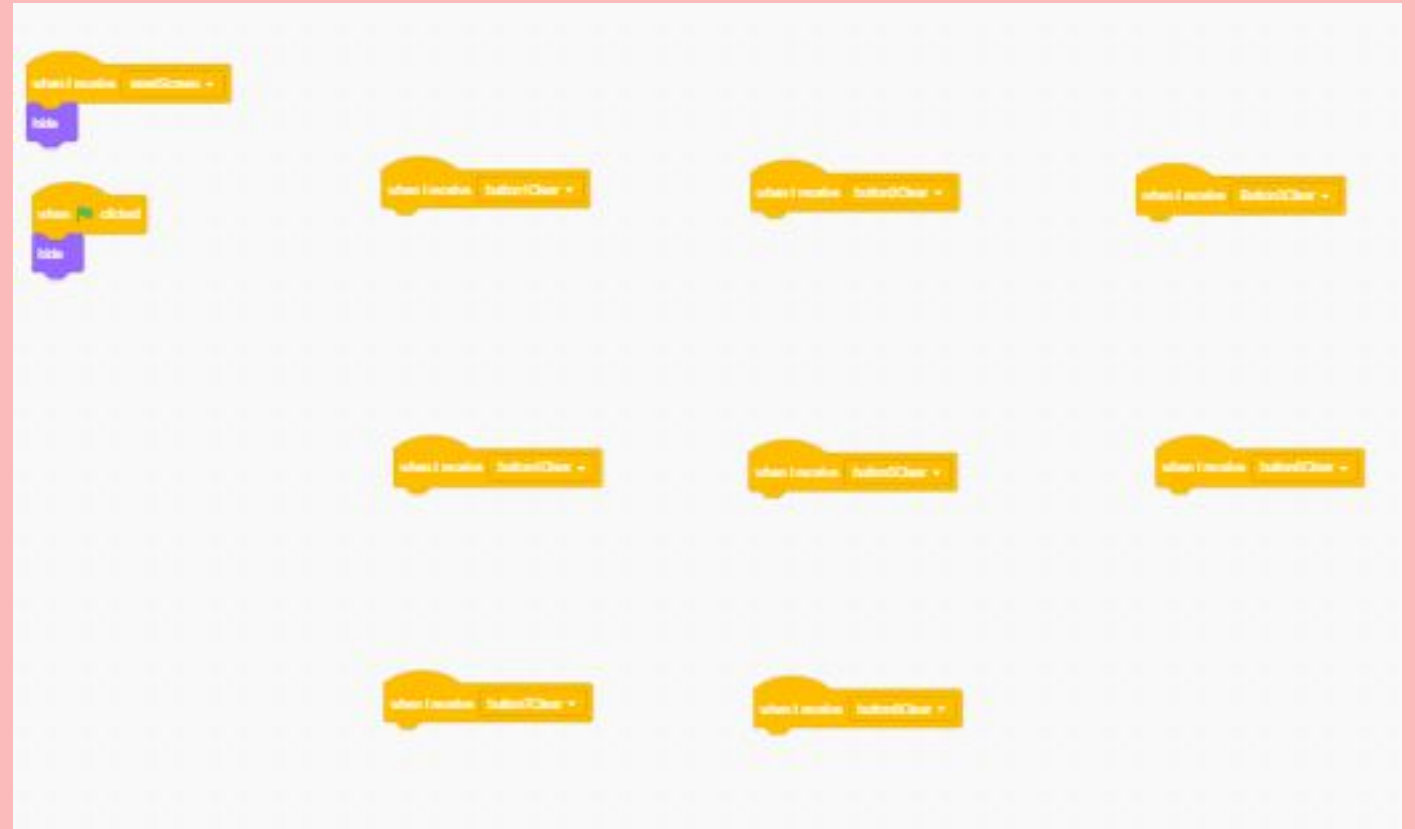
If they select an available room, it will be moved to the occupied rooms list.

What it will look like...



First look...

- When we first open the steward sprite it should look like this
- All of the code for check-in will be attached to button1Clear block.
- This means that when the button is clicked ONLY the code for product entry will run.



Step 1

Once 'Check-in' is pressed

When the button is clicked, this code will run, and the screen will be cleared.

We show the list of available rooms on the screen

Using an IF THEN block, we check if there are any available rooms.

If the list is empty, we send them back to the main menu.

```
when I receive button1Clear
show
show list Available Rooms
if length of Available Rooms = 0 then
say No rooms are available to be booked! Try again later for 1 seconds
broadcast resetScreen
```

Step 2

We ask the user which room they would like to check into

Using an IF THEN block, we check if the room they entered is available

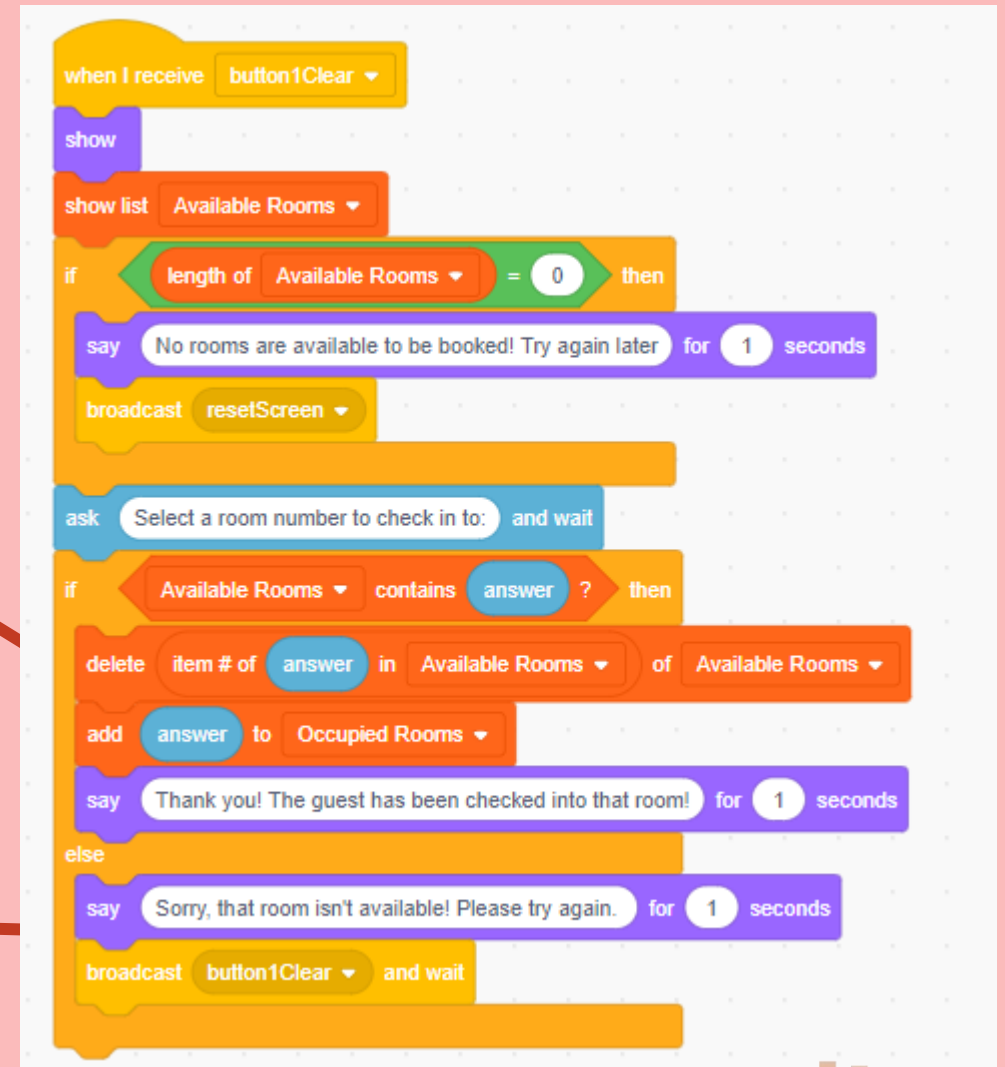


```
when I receive button1Clear
show
show list Available Rooms
if length of Available Rooms = 0 then
say No rooms are available to be booked! Try again later for 1 seconds
broadcast resetScreen
ask Select a room number to check in to: and wait
if Available Rooms contains answer ? then
else
```

Step 3

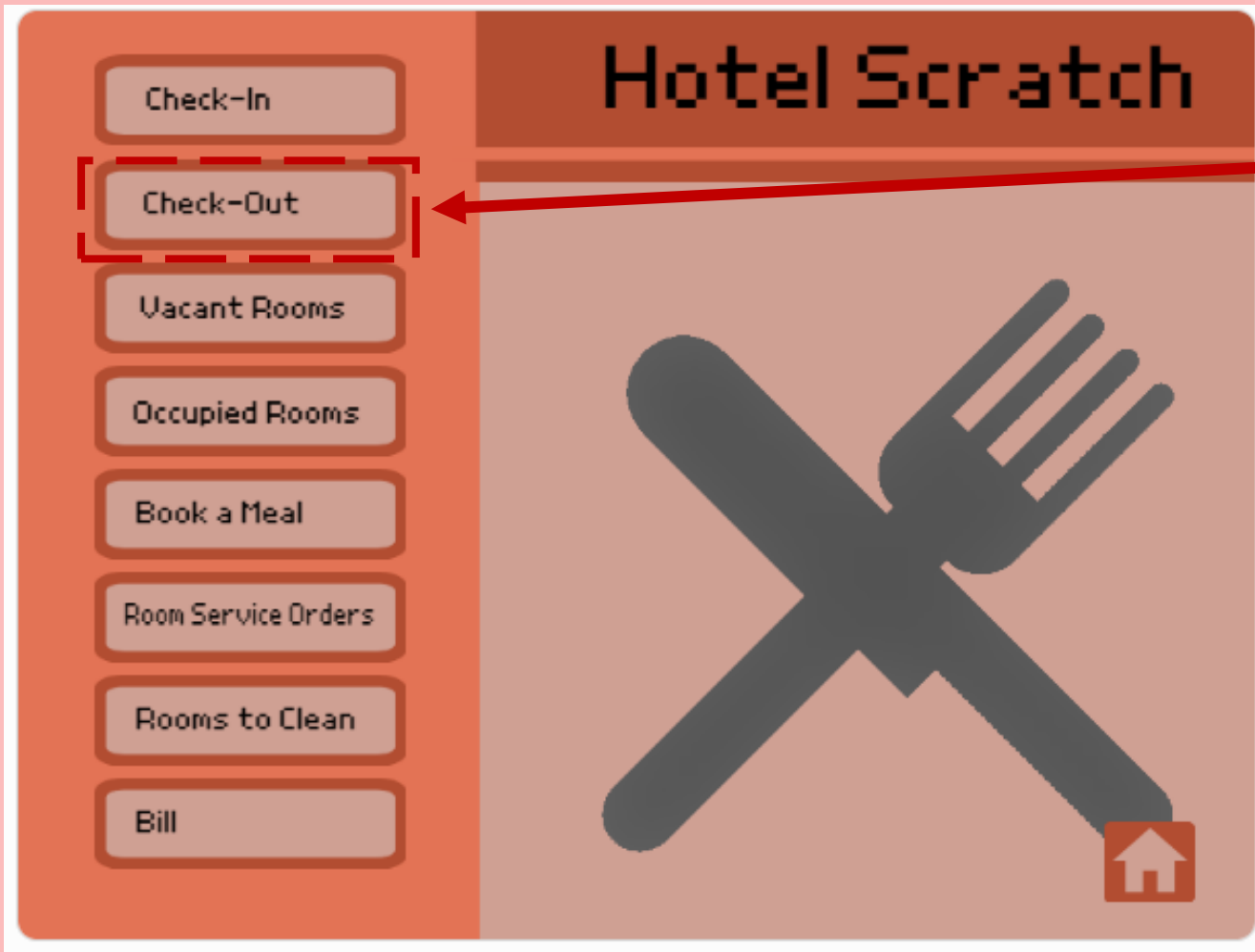
If the room was available, then we remove the room from the Available Rooms list and add it into the Occupied Rooms list

Otherwise, we display an error message and return them to the start



```
when I receive button1Clear
show
show list Available Rooms
if length of Available Rooms = 0 then
say No rooms are available to be booked! Try again later for 1 seconds
broadcast resetScreen
ask Select a room number to check in to: and wait
if Available Rooms contains answer ? then
delete item # of answer in Available Rooms of Available Rooms
add answer to Occupied Rooms
say Thank you! The guest has been checked into that room! for 1 seconds
else
say Sorry, that room isn't available! Please try again. for 1 seconds
broadcast button1Clear and wait
```

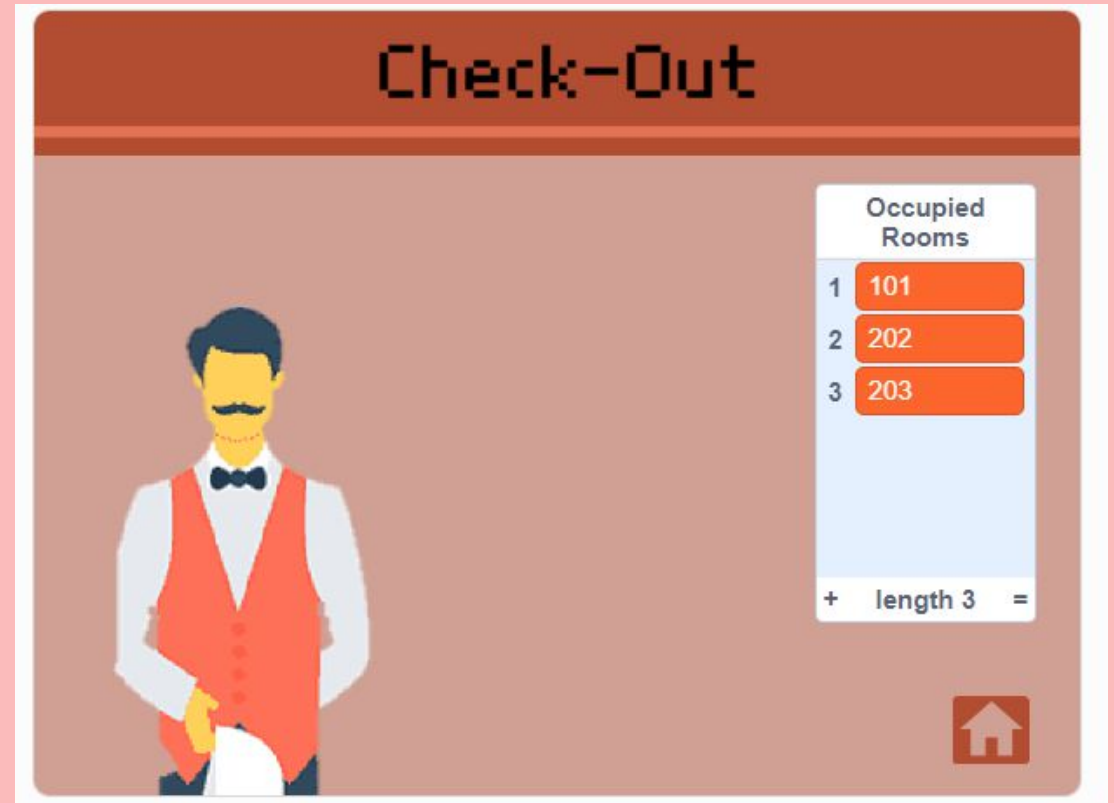
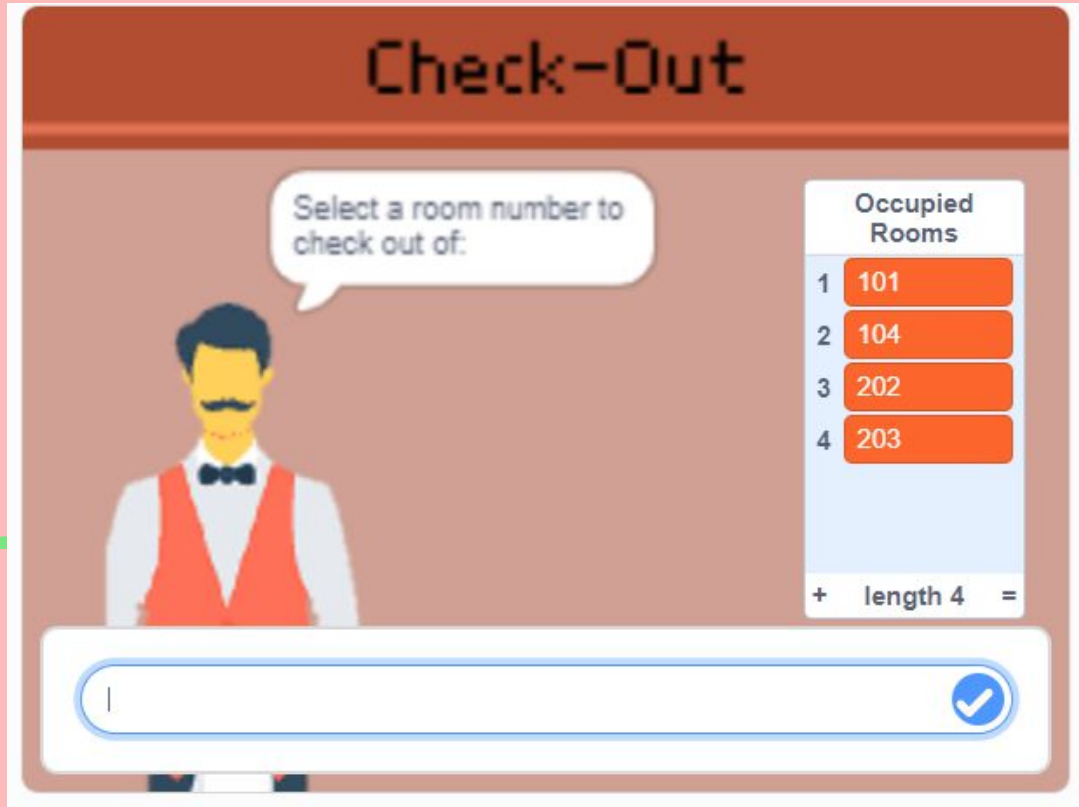
Check-Out



This button will allow the user to check out of their occupied room.

We will check if there are any rooms to check out of, and then ask the user which room they would like to check out of.

What it will look like...



Step 1

Once 'Check-out' is pressed

When the button is clicked, this code will run, and the screen will be cleared.

We show the list of occupied rooms on the screen

Using an IF THEN block, we check if there are any occupied rooms.

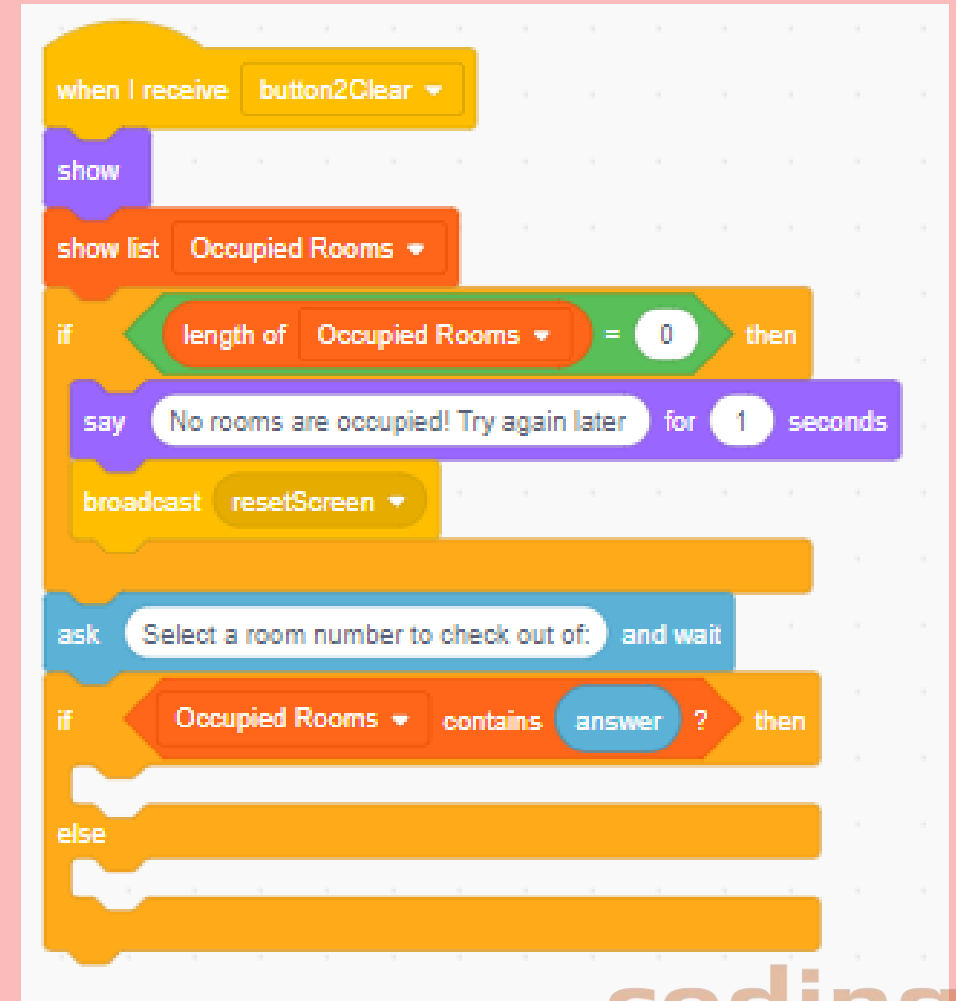
If the list is empty, we send them back to the main menu.

```
when I receive button2Clear
show
show list Occupied Rooms
if length of Occupied Rooms = 0 then
say No rooms are occupied! Try again later for 1 seconds
broadcast resetScreen
```

Step 2

Ask the user which room they would like to check out of.

Then have an IF ELSE block to check whether the user's room exists within the Occupied Rooms list

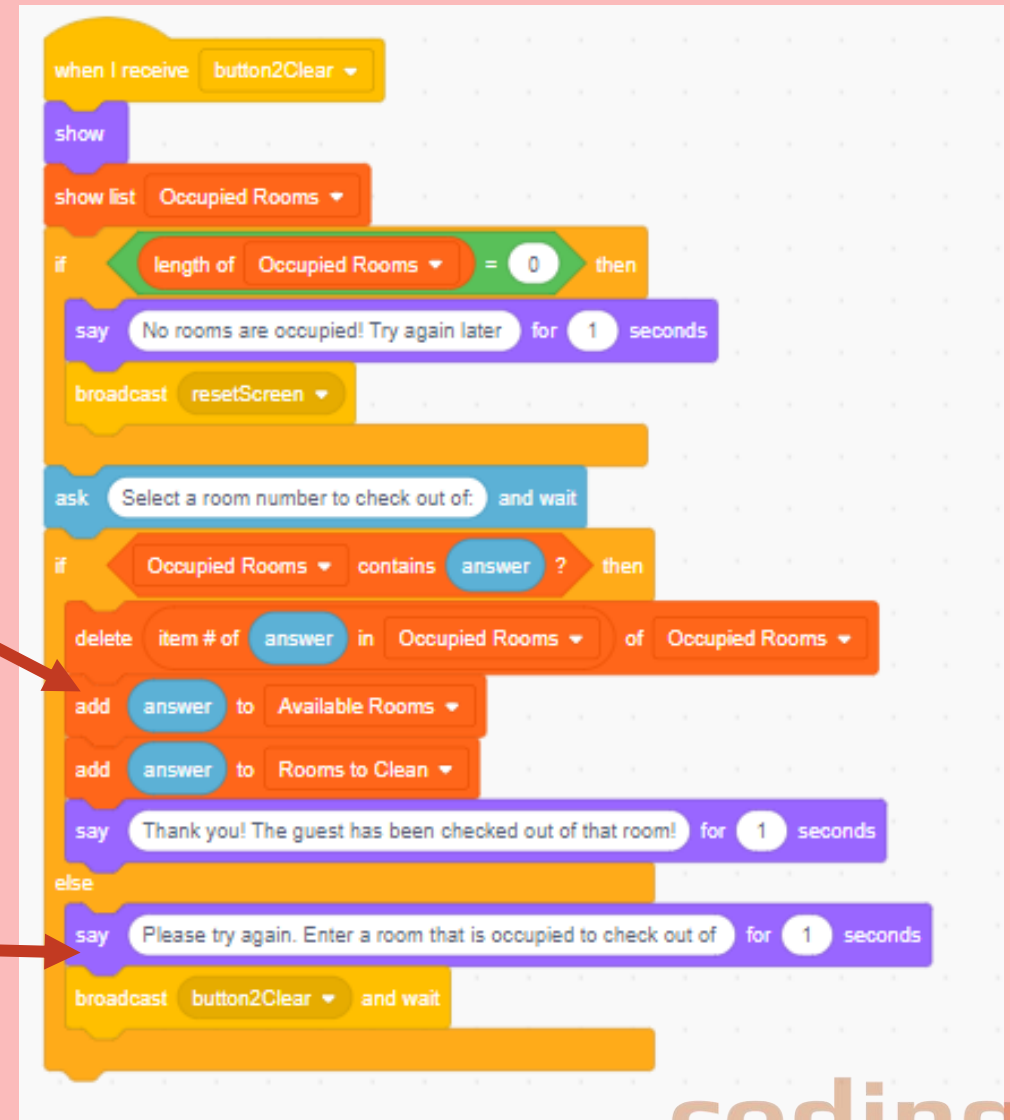


```
when I receive button2Clear
show
show list Occupied Rooms
if length of Occupied Rooms = 0 then
say No rooms are occupied! Try again later for 1 seconds
broadcast resetScreen
ask Select a room number to check out of: and wait
if Occupied Rooms contains answer ? then
else
```

Step 3

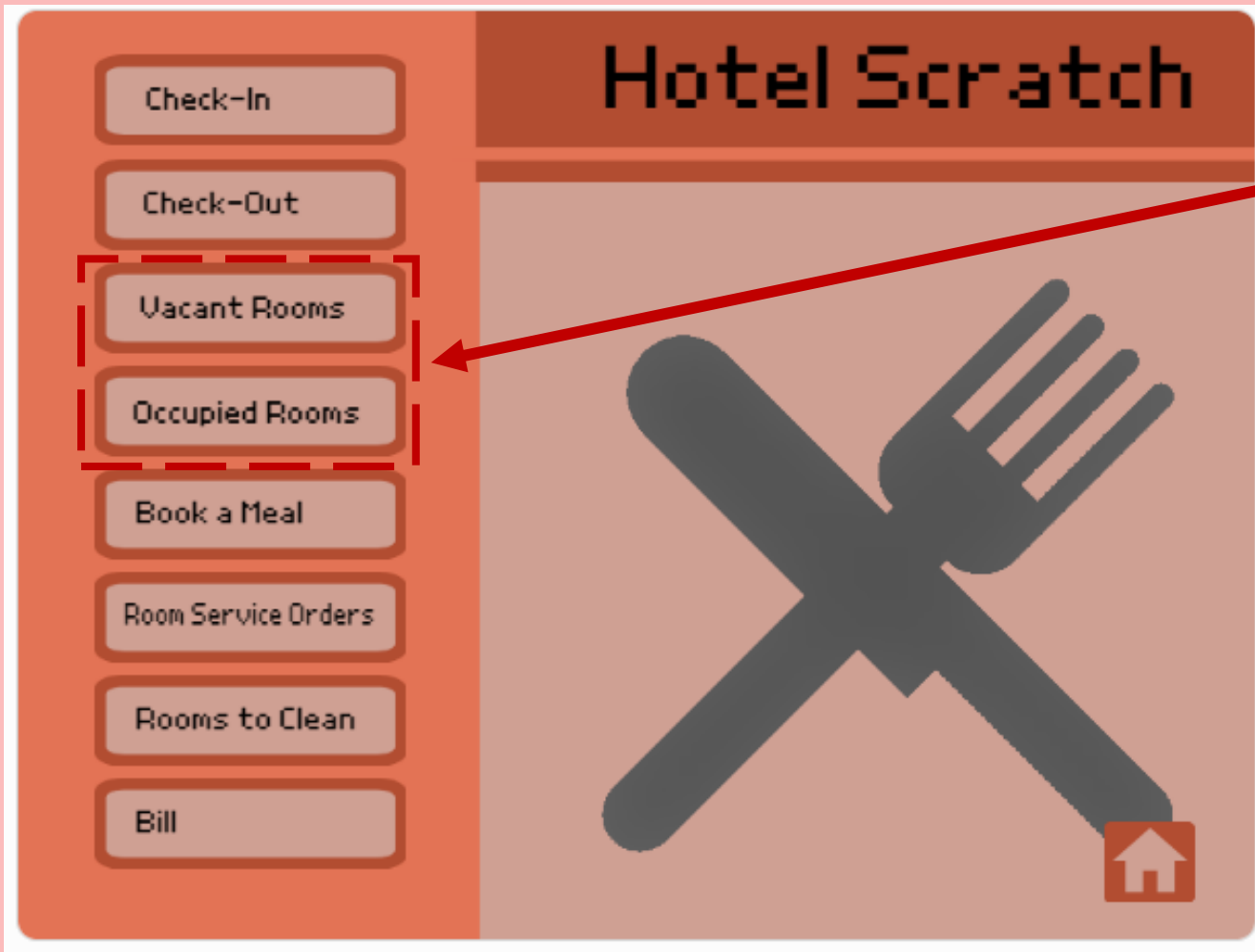
If there is a room to check out, we delete that room from Occupied Rooms and add that room number into the 'Available Room' and 'Rooms to Clean' list

Otherwise, we display an error message and return them to the start



```
when I receive button2Clear
  show
  show list Occupied Rooms
  if length of Occupied Rooms = 0 then
    say No rooms are occupied! Try again later for 1 seconds
    broadcast resetScreen
  ask Select a room number to check out of: and wait
  if Occupied Rooms contains answer? then
    delete item # of answer in Occupied Rooms of Occupied Rooms
    add answer to Available Rooms
    add answer to Rooms to Clean
    say Thank you! The guest has been checked out of that room! for 1 seconds
  else
    say Please try again. Enter a room that is occupied to check out of for 1 seconds
    broadcast button2Clear and wait
```

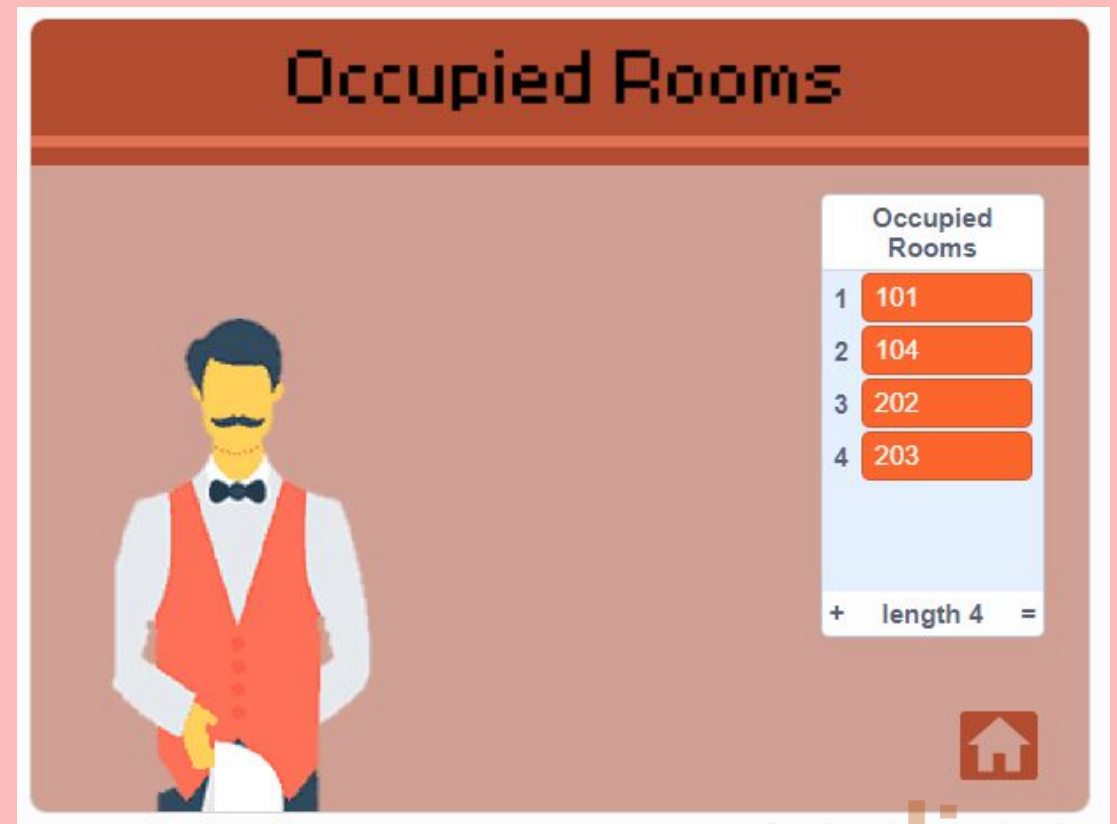
Viewing vacant and occupied rooms



Finally, these two buttons are very straight forward.

All these will do is show lists of the Vacant and Occupied Rooms

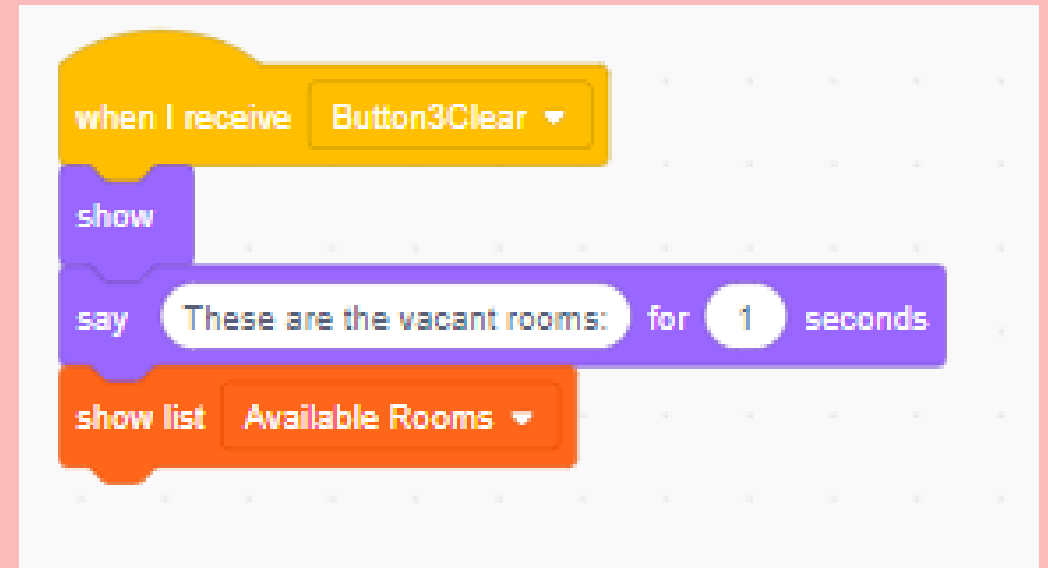
What it will look like...



Step 1

Once 'Vacant Rooms' is pressed

This code will show the list of available rooms

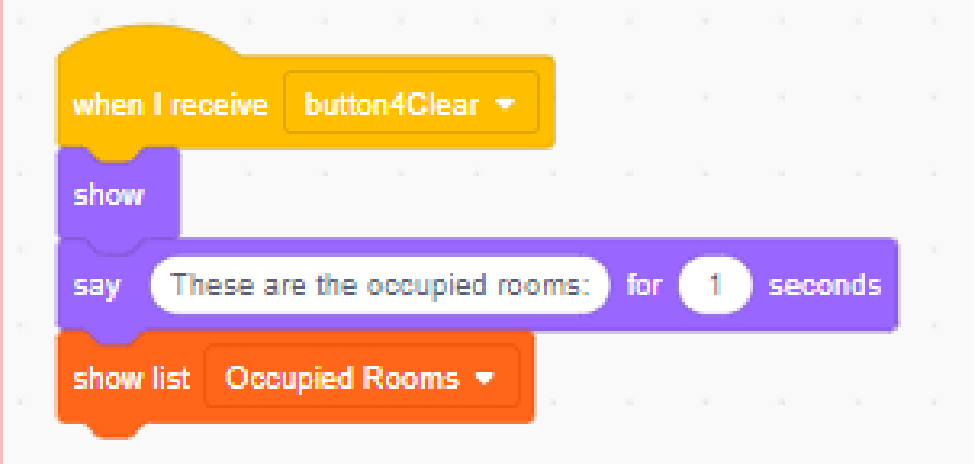
A Scratch code block on a white background with a light gray grid. The code consists of four stacked blocks: a yellow 'when I receive' block with 'Button3Clear' selected; a purple 'show' block; a purple 'say' block with the text 'These are the vacant rooms:' and a duration of '1 seconds'; and an orange 'show list' block with 'Available Rooms' selected.

```
when I receive Button3Clear
show
say These are the vacant rooms: for 1 seconds
show list Available Rooms
```

Step 2

Once 'Occupied Rooms' is pressed

This code will show the list of occupied rooms



```
when I receive button4Clear
show
say 'These are the occupied rooms:' for 1 seconds
show list Occupied Rooms
```

**You have now ready to
move onto the
intermediate section!**

4 MIGRANT WOMEN RETURNERS

