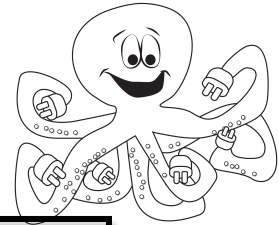


WiredUp Activity 5: Scene Changes



Vocabulary

Show: Make a sprite appear or reappear on the stage

Hide: Make a sprite disappear from the stage

Change Background: Change the background picture for the stage

Overview

In this project, you will learn how to make scene changes. Different scenes are distinguished by which sprites are visible and what the background looks like. In a game, the scene may change when the player travels to a different location or moves to a higher level. In an animation, the scenes may change to show different scenes from a story. In a project, the scenes may change when you present different information about your subject.

For each scene change, you must determine **when** it is going to happen, what the **new background** will be, which sprites in the first scene need to **disappear** (hide) for the second scene, and which sprites hidden in the first scene need to **appear** (show) for the second scene.

Recall that earlier we learned to initialize sprites when we started a program. Since we will now have more things that can change such as the background, we will have more things to initialize on green flag.

Background

The first step is to change the background. The backgrounds are controlled by the special sprite named **Stage**. You can see it on the left-hand side of the sprite list. The scripts for the stage sprite can

switch to background

Hide/Show

hide and **show** determine which sprites are visible on the stage at a given time.

Initialization reminders:

If you **change the background**, use

switch to background

If you **hide** or **show** a sprite, use

hide and **show**



Explore:

Your teacher will first play the completed project for you. You can play it again any time by opening and running Lesson5GoldRushExample.

Now open the project Lesson5GoldRush. What you see – is that the proper starting screen?

Click on the green flag. Then click on the Click Me button. Notice the Click Me button disappears, just as it should, but the next scene does not start. How does the Click Me button notify all the other sprites that the scene needs to change?

How should all of the other sprites find out about the scene change?

Now look at the sprite list. For each sprite, look at the costumes available. You can see that all of the sprites and their costumes are there for you to use. Now click on the stage and look at the backgrounds (click the background tab).

Assignment:

Your project is to take the sprites, costumes, and backgrounds and program them to (roughly) match the example project.

Plan:

Open the Lesson5GoldRushExample again. Click the green flag.



In this section you will be filling out the table below. The instructions under the table will tell you how to do this.

	Scene#	Button	Gold Finder	BlueNext	GoldPan
PurpleNext Cause					
background1	0				
background2				P	
background3					
background4					
background5					
background6					

1. First identify, for each background, what scene number it is. Fill in the "Scene#" column in the above table. background1 is the starting scene, so we will label that 0.
2. Now look at each sprite and put an 'X' in any scene where the sprite is visible the entire scene and 'P' where it is visible for only part of the scene. The blue Next arrow has been filled in for you.
3. Now look at the transition between scenes. For each background, does the background change occur as a result of clicking a sprite ('C'), based on timing('T'), or based on green flag ('G')? Fill in the cause column with a 'C', 'T', or 'G'.

How can you program in a delay to make a scene change after a certain delay rather than when someone clicks? (Hint: Look at the blocks in **Control** because those determine **when**)

Create:



Now it is time to implement your project. Looking at your planning table, program in the messages, hide, show, and background changes necessary. You are also given some sample code to start the person walking. You can make the gold pan shake in a similar way. Don't forget to initialize every sprite with On Green Flag!



Pro tip: *If you draw costumes for one project, you can use them for another project. Just right click on the costume (in the costumes tab of the sprite) and choose export costume. Then, in the project where you want to use the costume, press the import button.*

Double-check – did you remember everything?

- 1) Did you match the order of the scenes?
- 2) Did you put wait blocks between actions?
- 3) Did you make the dude walk and the pan shake?
- 4) Did you save it and upload it to the website?

Improve:

After you have finished, think about what you could do to make your project more interesting. Are there any other animations you could have done with your person or gold pan?



Are there any other additions you could make?



Reflect:

What happens if you increase the amount of time in your  block for the person walking?

Is there anything you found surprising when you were completing this project?

Did anything work differently from how you thought it should or would?

What was the hardest thing to figure out about the project?
