Headshots in Alice

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Introduction and Setup

To create objects with your face in Alice we’ll make the heads invisible and then drop in a billboard.

Making Heads Invisible

To make an object’s head invisible click on it on the object tree. Click next to the plus sign and navigate to the tab that says head. It may be in different places for different objects.

Making Heads Invisible

Black boxes indicate where there used to be a plus sign. When I clicked on it, a lower directory of sub-parts were revealed. This happens for many objects in Alice.

Making Heads Invisible

Change the isShowing property to false. To do this, click on the word true and choose false. Change the isShowing property of all your objects’ heads to false.
Adding Billboards

Once you have made all the heads of your objects invisible it is time to add billboards to replace the heads.

First you must have headshots of people who you may want to use. I used paint to cut off head shots of myself and co-workers. Save the head shots in a folder so you can find them later.

You can use paint to save a head shot.

Positioning Headshots

Click on the object to position the head shot you just imported.

Use the Move Objects Freely button on the Add Objects screen to position the head shot behind the person, the Move Objects Up and Down button to move it up, and the Resize Objects tool to get the head shot to be the right size.

Vehicle Property

With the head shot in place, we want to set its vehicle property to the object’s head of the object it is positioned on.

To do this, click on the picture in your object tree.

Click next to vehicle on the properties tab and choose the head of the object that the billboard is sitting in front of.

Note: headShot1 is on bob so head shot1’s vehicle property should be set to bob’s head.

From the Alice window click File, and then scroll down to Make Billboard. Locate the directory where you saved head shots.

Once you’ve found it, click Import to bring each head shot into your world.
The second headshot will go on my boy object. After making a second head shot import the picture into Alice as a billboard. Position it and set its vehicle property. Review the previous slides if you don’t remember how to do this.

Use the same technique shown in the earlier portion of this tutorial to drop in the third headshot.

Don’t forget to set the head shot’s vehicle property. If you don’t do this when you move your person the head shot will not move with it. This may be an undesired effect.

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Code Example

Lets add some code to move the ballerina, turn the heads of the other characters, and pan around the characters with the camera. You will see how the billboards act as the characters’ heads.

First click on blueBallerina, then click methods in the details panel.

Drag the method move into the method editor, Select move, then up, then 1 meter.

Now Right click on the left most tip of the new line you just created and choose make copy.

Change the direction on the second line from up to down.

Drag a Do in order into the method editor and drop it under the two lines you created. Now drop each of the two lines into the Do in order statement.
Add another Do in order into the method editor.

Click on a second person in your object window.

Click methods in the details panel, then drag turn into the Do in order.

Choose left, then choose ¼ revolution.

Make a copy of this line by right clicking it then clicking make copy.

Change the right in the newly created line to left.

Click on a billboard in the object tree.

The billboard you click should not be on the person who is performing an action already.

Drag that billboard and drop it on top of bob or which ever character you chose.

Note: The object clicked in the object tree is highlighted in the world (Mac users don’t see this).

Make a copy of the second Do in order statement.

To do this right click on the left most tip of the Do in order, and then choose make copy.

Click on the billboard that is on a character who is not being animated in your code already.

Drag it and drop it to replace the head shot in the Do in order you just copied.

Change left and right in the third Do in order to forward and backward.

Drag a Do together into the method editor.

Now drag all of your Do in order statements into that Do together.
Lastly, we will make the camera pan around the three characters so we can see the back of their heads.

Click on camera in the object tree.
Click on methods in the details panel.
Drag the statement turn into the method editor and drop it outside of the Do together.
Select right, then choose 1 revolution.

Click more again, and then select asSeenBy.
Then choose the middle character on your screen. For us, this is boy.

Click Play to see this program.

A Note about Billboards:
When the camera is behind the characters, the billboards are a mirror image.
Each billboard has its own set of built-in methods.
Billboards are fundamentally the same as any other Alice object.

Hope you enjoyed this tutorial :-D

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