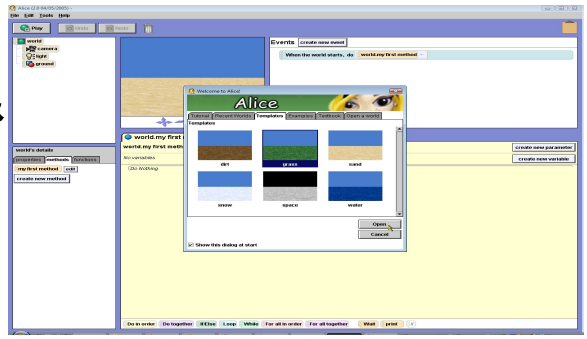
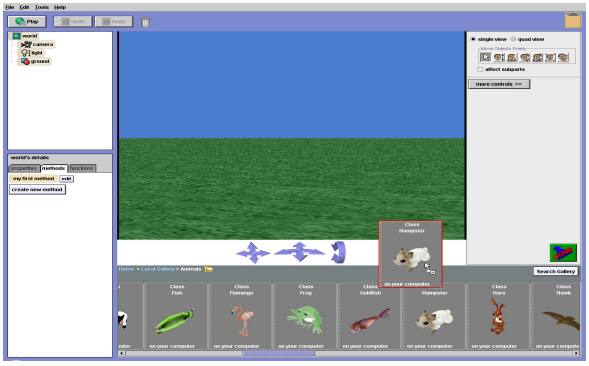
My First ALICE World

The Hamster Dance

PART 1: Set Up Scene

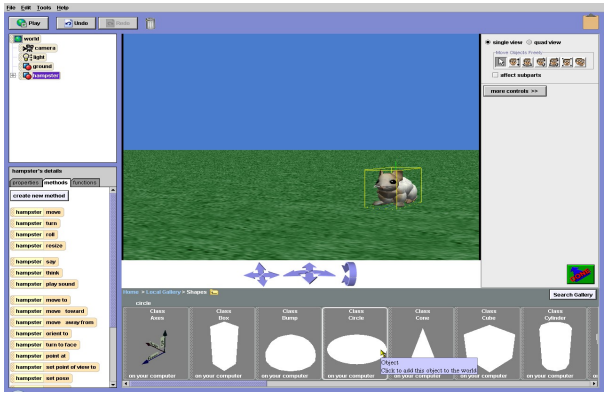
1. Start a new world. (grass & sky)



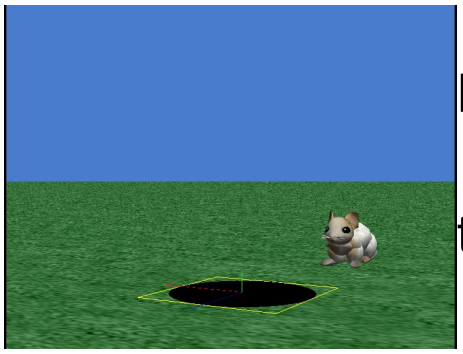
2. 

ADD OBJECTS Add a hamster (animals)

3. She's awfully small; let's make her bigger (10X)
4. Add a circle (shapes). This will be a hole. It seems covered by grass, let's move it up a bit, and change it's colour to black so it looks like a hole.



5. If you are asked to save your world, do so now. Pick a name that will make sense to you later, like maybe "HamsterDance"



Now our scene is set up. Click on the 

button.

Now what we want to do is have her dance. To do that we need to pose her into several different positions.

Let's start by “capturing” her original pose. We'll call that “original”.

Next we'll have her move her arms and legs. To do that we'll stand her up (turn backward ¼ revolution). Now she's in the ground so we should move her up (which is actually forward). 1 meter is good.

Now we'll move her head (forward ¼), arms and legs into a new position and capture that. Remember to select the whole hamster agin before capturing the new pose.

Let's try putting her back into her original pose. Notice she doesn't go back to her original POSITION, just her ***pose***.

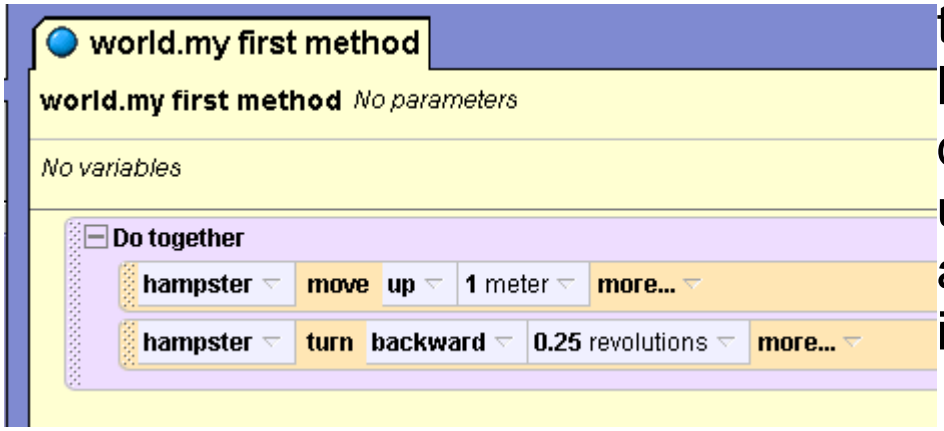
Now we make up a second pose and capture that.

Now we are ready to start programming the movements.

We need to put her back where she was at the start. Set her pose back and move her down again (turn forward ¼, then down 1 meter).

Ready.

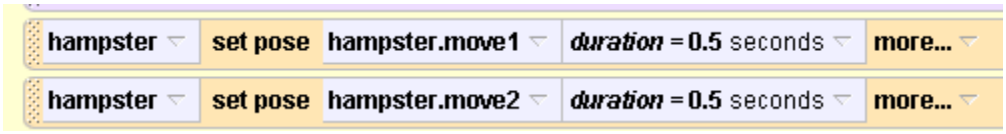
To make her do a dance we will now program some of the moves we've been doing during the set-up. Drag the turn and move tiles into the ***method***.



Let's see what happens if we click on 

This is OK, but if we make the two things happen ***together***, it will look better.

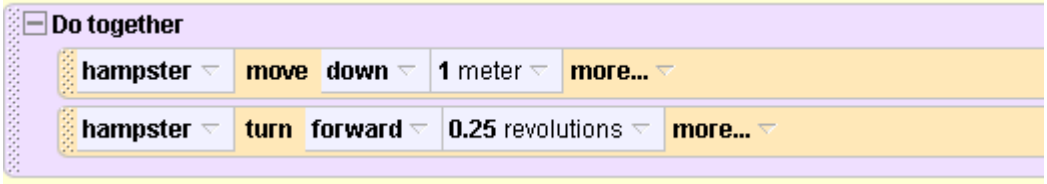
Next, make her dance! All we need to do is set her poses, by dragging the pose tiles into the method. Try playing her again....



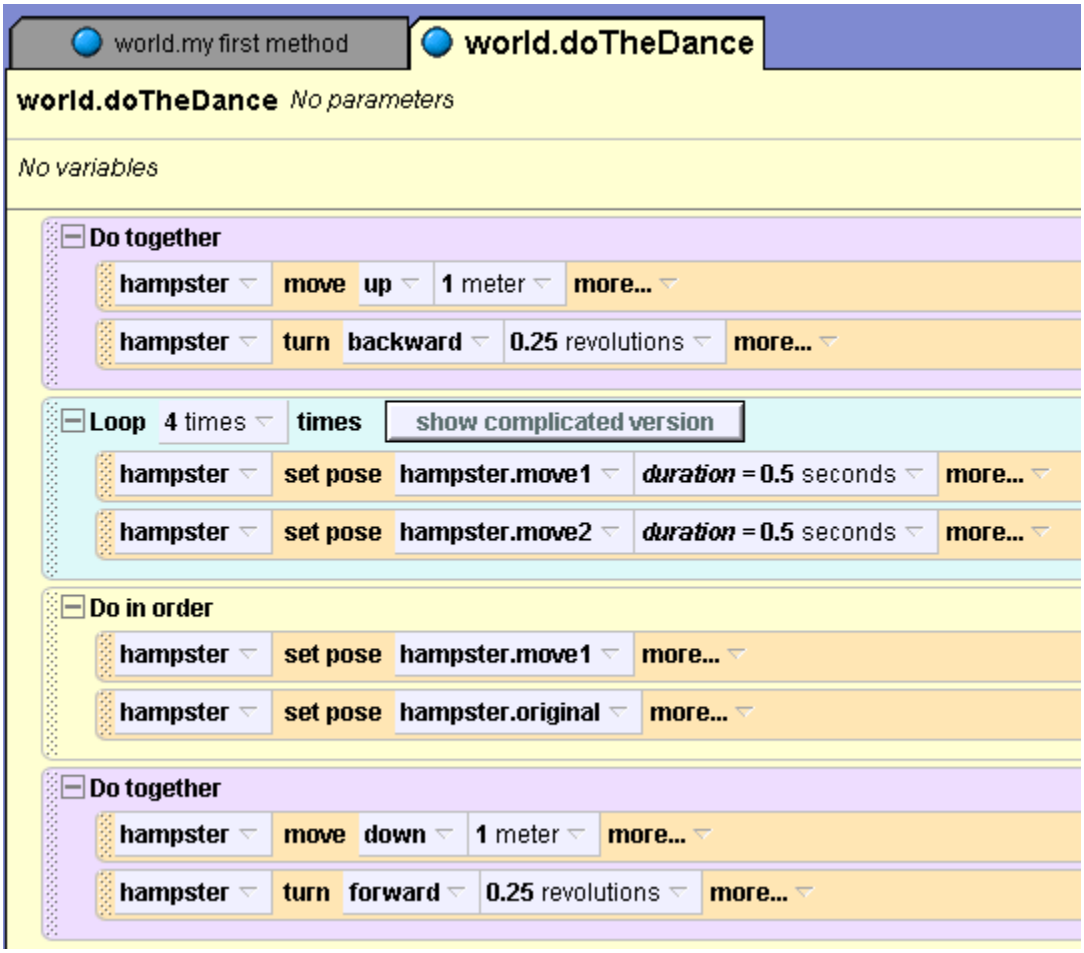
We *could* get her to dance for a while by dragging poses into the method repeatedly, but there's an easier way: a ***loop***. We'll drag in the loop; drag the set pose tiles into the loop, and see what we've made. Let's have her do it a bunch of times (say, 4). AND then let's have her do it faster.

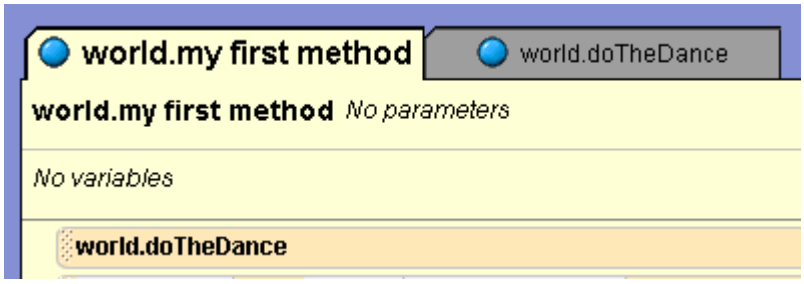
She ends up in the last pose, which looks a little silly, so let's pose her back into the first one after we've done looping.

Great. Let's put her back into her original pose and position. This is going to be the opposite of the moves we did at the start, so let's just copy and modify them.



To keep our main method tidy and small, we're going to put what we've done so far into a new method we'll call “doTheDance”. Now instead of all that code, we replace it with a ***call*** to our new method.





Now for the finale:

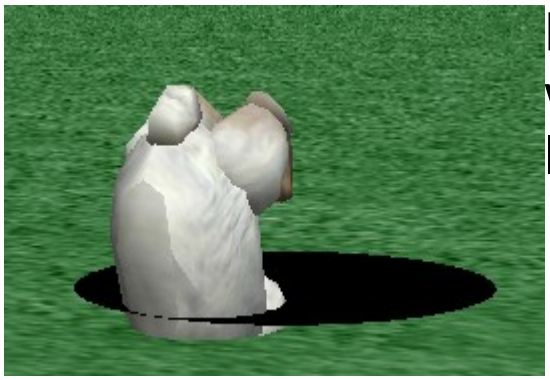
For her finale, she is going to 'run' around the hole and then jump into it. Here's how we do that:

Getting her to go around the hole involves moving forward AND turning at the same time. We *could* do some calculations to figure out a trajectory, but there's an easier way – we simply turn her from the perspective of the hole using ***as seen by.*** It works, but she is facing wrong so we need to fix that. Let's try ***turn right ¼.***

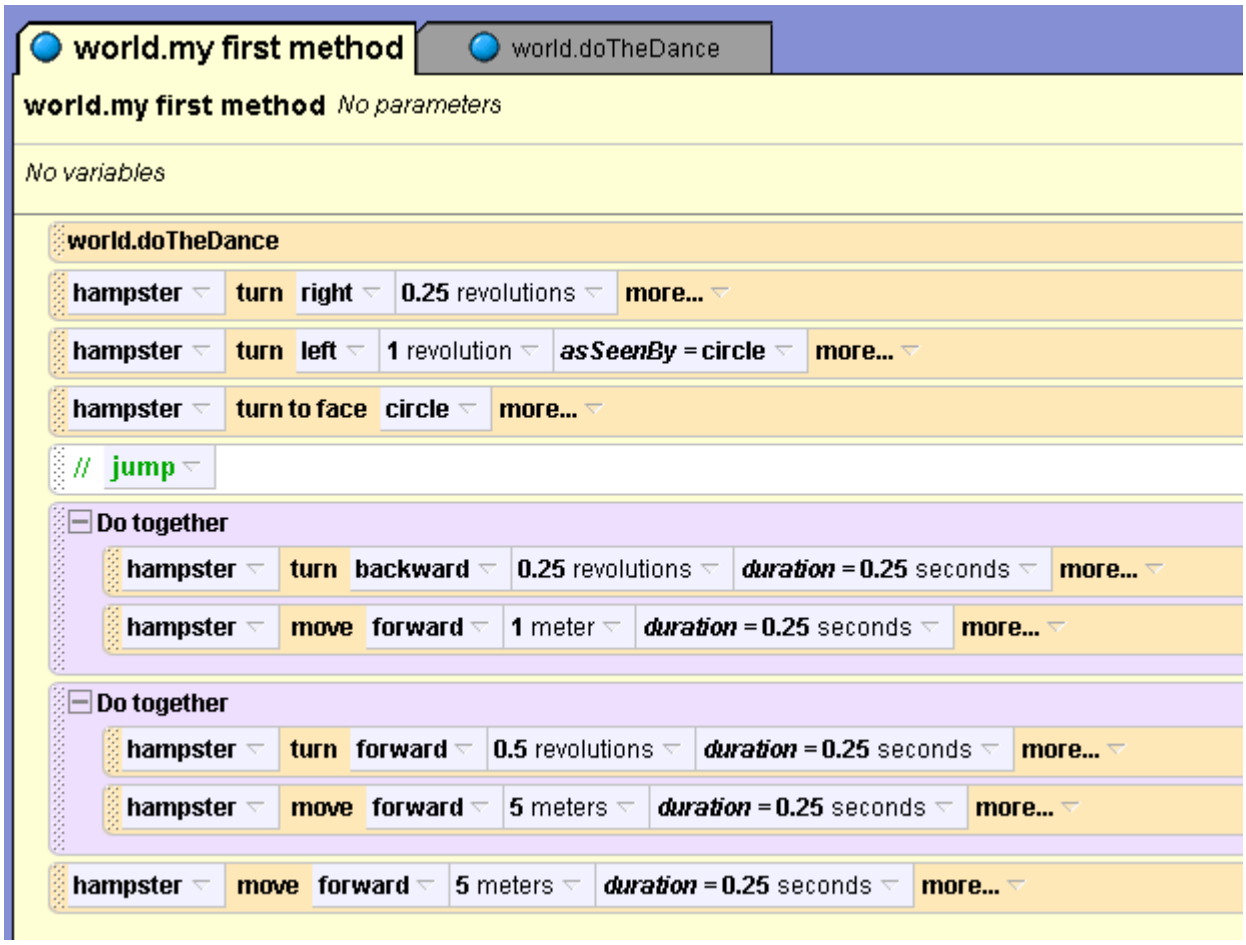
That seems to work.

Last: She needs to face the hole and jump in. We'll do this in several moves:

1. ***turn to face*** the hole
2. Make her jump in the air (turn, then move and turn up, then move and turn down)
3. To get her into the hole, she will have to move down farther than she moved up.



Not bad, but she didn't go all the way down and the hole seems a little off center. Let's fix that.



TA-DA!!!