

Lesson 4: Add Rotation and Randomization

Try It: Practice Activities

Instructions:

Open the "WhiteRabbitProject" project you saved in the previous lesson. You will use this project for all of the practice activities listed below. Download this lesson's project file if you did not complete the previous lesson's Try It activities.

1. Program an object to rotate.
 1. Program the White Rabbit to do one complete spin to the left.
 2. Save the project.
2. Create a control statement.
 1. Program both of the White Rabbit's ears to wiggle at the same time.
 2. Save the project.
3. Program an object's sub-part to rotate.
 1. Program the White Rabbit's right ear to wiggle once back and forth.
 2. Save the project.
4. Randomize object movement.
 1. Make White Rabbit's ears wiggle a random number of times equal to an integer between and including 1 and 3.
 2. Save the project.

Optional Activities

Complete the following optional practice activities below to continue practicing the concepts you learned in this lesson.

1. Browse the gallery tab "Gallery by Theme". Set up an initial scene using the objects in the Southwest theme. Be sure to include the horse object in the scene and place him near a pond. Program the horse to do the following:
 1. Move its head up and down while simultaneously saying "Neigh!"
 2. Move its tail back and forth a random number of times equal to an integer between and including 0.25 and 1.0.
 3. Tilt its head down to look in the pond. Hint: This will require you to manipulate the head and neck sub-parts to achieve this action.
 4. Save the project.
2. Browse the gallery tab "Gallery by Theme". Set up an initial scene using objects in the snow theme. Be sure to include a penguin object in the scene. Program the penguin to do the following:
 1. Turn its head a random number of times equal to an integer between and including 0 and 1.
 2. Flap its wings at the same time.
 3. Save the project.
3. Set up an initial scene with a biped object of your choice. Program the object to do the following:
 1. Say "Hello!" and simultaneously wave its left hand.
 2. Say "Watch me spin!" and simultaneously turn a random number of times equal to an integer between and including 0.25 and 4.25.
 3. Say "Goodbye!" and simultaneously wave its right hand.
 4. Save the project.