CompSci 94
Classwork: Game with Collisions
April 3, 2018

Prof. Susan Rodger
1) Setting up scene 1

• Use any ground

• Drag in these objects:
  – Biped: bunny (5 of them), ghost
  – Billboard (paint black)

• See next slide on where to place them
Placement of objects

• Spread the bunnies out
• Put the ghost in the front right corner

• Make the billboard (a curtain) large to cover the complete scene
Placement of objects (cont)

- Using a one shot move the curtain up 10 out of the way
- Drop a camera marker
- Then turn the camera to the right until you can’t see anything from scene 1
Now setup scene 2

- Drop in quadruped: cow
- Drop a second camera marker here
- Move the camera back to scene 1
The story

• The ghost will tell you that the bunnies will jump eradically, that you need to move the ghost to collide with all of the bunnies to win, that you can use the arrow keys to move the ghost and then that you can start.

• At that point, the bunnies start moving radically

• Whenever a bunny collides with the ghost, the bunny should be made invisible and then move way down so it is out of the way
The story (cont)

• Once you have the ghost collide with all the bunnies, then the ghost should tell you the game is over and you have done well.
• The bunnies should stop jumping (even though you cannot see them)
• The curtain should come down.
• (Here you need to figure out all you need to do while the curtain is down)
The story (cont)

• The curtain comes up and scene 2 shows a cow in the snow! (note ground changed)
• The cow says click on me
• When you click on the cow, it says “Moo”

• The end
You might want to create the following properties

- **Scene Properties:**
  - Array of bunnies
  - Boolean: `gameOn` – only true when game in scene1 is on
  - Boolean: `gameOn2` – only true when it is time to play the game in scene2
How to get the bunnies to jump eradically

• Write a Biped jumpRandom procedure for one bunny to jump eradically
  – Generate a random number for the duration time
  – Generate a random number for the height
  – Then move the bunny up and down using those random numbers.
  – You could also add in a dotogether and have the bunny move forward 0.5 at the same time it moves up, and move backward 0.5 at the same it moves down
How to use jumpRandom

• Have a separate sceneEventListener that waits until the game is on, then as long as the game is on, it has all the bunnies at the same time jumpRandom

• If the game is over, they should stop jumping
More events you might want

• You need an event to detect collisions between the ghost and a bunny
• You need an event to move the arrow keys (fast) for the ghost
• You need an event to click on the cow so it can say moo