CompSci 94
Classwork: Game with Collisions
November 8, 2018

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1) Setting up scene 1

- Use any ground
- Drag in these objects:
  - Biped: yeti (6 of them), penguin (double its height)
  - Billboard (paint black)
    - Name it curtain
    - Make this big, height 4 and put in the front to cover the screen, then make it invisible
- See next slide on where to place the yeti and penguin
Placement of objects

- Spread the yeti out
- Put the penguin in the front right corner
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 penguin will tell you that the yeti will jump eradically, that you need to move the penguin to collide with all of the yeti to win, that you can use the arrow keys to move the penguin and then that you can start.
• At that point, the yeti start moving eradically
• Whenever a yeti collides with the penguin, the yeti should be made invisible and then move way down so it is out of the way
The story (cont)

• Once you have the penguin collide with all the yeti, then the penguin should tell you the game is over and you have done well.

• The yeti 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 yeti
  - 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 yeti to jump radically

• Write a Biped jumpRandom procedure for one yeti to jump radically
  – Generate a random number for the duration time
  – Generate a random number for the height
  – Generate a random number for how far to move
  – The yeti moves as follows.
  – Move up and down a random amount
  – Move forward a random amount
  – Move up and down again the same random amount it moved up and down before
  – Move back the same amount it moved forward.
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 yeti 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 penguin and a yeti
• You need an event to move the arrow keys (fast) for the penguin
• You need an event to click on the cow so it can say moo