CompSci 94
Classwork: Visiting friends
February 8, 2018

Prof. Susan Rodger
Very Important

• Pay attention to
  – What TYPE of procedure to create
  – How many parameters for each procedure
  – What TYPE of parameter
1) Setting up the scene

• Add in any ground cover, I picked dessert
• Drag in these six objects placed as they look in the next slide (all from the quadruped folder)
  – Dalmatian (she goes in the bottom right, the others just spread them out far)
  – Cow, skunk, squirrel, AbssynianCat (we renamed cat), Camel
  – They must all be quadrupeds!
2) Create a **Dalmatian** procedure called *tallerOneSpeaks*

- This procedure should have **one** parameter, an object, to allow the Dalmatian to compare its height with another animal (the object). The taller of the two should speak and say “I’m taller”. Since all the objects are quadrupeds, choose *quadruped* for the parameter type.
- Test it with Dalmatian and squirrel
- Test it with Dalmatian and camel
3) Create a **Dalmatian procedure called** *jump*

- The jump procedure is simple, the dog should just move up, move forward, and move down.
- Add **two** parameters, for the distance to go up and the distance to go forward.
- Test out this procedure and make sure it works with different arguments!
4) Create a Dalmatian procedure called *visit*

- This procedure will have two parameters
- Add a friend parameter (a quadruped)
- The Dalmatian (dog) and friend should turn to face each other.
- The dog should move and stop approximately 2 units in front of the friend
  - Use one of the functions that gets the distance such as `getDistanceInFrontOf` (that stops about one unit in front of), then click on it and add math to subtract 1 unit from the distance so it is really about 2 units in front of
4) Visit continued…(part 2)

• Add a greeting parameter that the user should send in a word such as Hi or Hello.

• The dog should say the parameter greeting to the animal and also say the animals name. Example, “Hi Cow”. You will need to say a string that has three pieces of information: a) the greeting passed in, b) a blank, c) since the animal is a parameter, you can say the parameters name.

\[
\text{this say (paramName for phrase) + " " + (paramName for friend)}
\]
4) Visit continued … part 3

- Have the taller of the two say they are taller (call your procedure!)

- The dog can jump his height. If the dog is taller than the friend, have the dog jump over the friend (the dog jumps the dog’s height and must clear the animal on the other side). How do you determine how long the animals is? And add in some extra units to make sure you clear the animal. (use your jump proc)

- Otherwise the friend is taller so the dog circles halfway around the friend.
5) Story for myFirstMethod

• Call visit for each of the five friends of the dog. For each call to visit, the dog should pick a different animal friend to visit and say a different greeting.