CompSci 94 Saving objects, Count Loop October 8, 2024

```
count up to 5 v

this.pig v move FORWARD v, $\frac{1.0}{1.0} v$ add detail v

this.pig v turn RIGHT v, $\frac{1.0}{2.25} v$ add detail v
```

Prof. Susan Rodger

NC State Fair





Ezzell's Somethin' Good Shrimp & Grits on a Stick





At the Raleigh Fair Grounds

Announcements

- Assignment 3 due tonight!
- QZ12 and Videos due before next class

Q1. How do you save an Alice object to read into another project?

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• Start with six-sided shape and select the object



Select "Save to class file"



• Give it a different name to distinguish it

Q2. Why would you want to save an object and read it into another Alice program?

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- Re-use code
 - Bunny already knows how to walk/hop etc.
- What do you need to do to take advantage of this?
 - Write lots of object procedures before saving it out.

Q3. How many times does the pig say Wow?

```
count up to say wow add detail count up to wow say www add detail loop loop
```

Q3. How many times does the pig say Wow?

```
count up to 3 v

this.pig v say www add detail v

count up to 4 v

this.pig v say www add detail v

loop
```

- 15 times total
 - 3 for first say, 4*3=12 for second say

Q4. Count loop

• What **type** of value can you use for the number for the count loop?

 Suppose you want your object to hop repeatedly until it stops in front of an object. How do you do that with a count loop?

11

Q4. Count loop

- What **type** of value can you use for the number for the count loop?
 - Only a whole number
- Suppose you want your object to hop repeatedly until it stops in front of an object. How do you do that with a count loop?
 - Convert the decimal distance into an integer and use that integer



12

More detail on Count with function

• First: pick any number

```
count up to 10 drop statement here
```

• Second: Decimal to Whole number option

```
count up to toFlooredInteger 1.0 V drop statement here
```

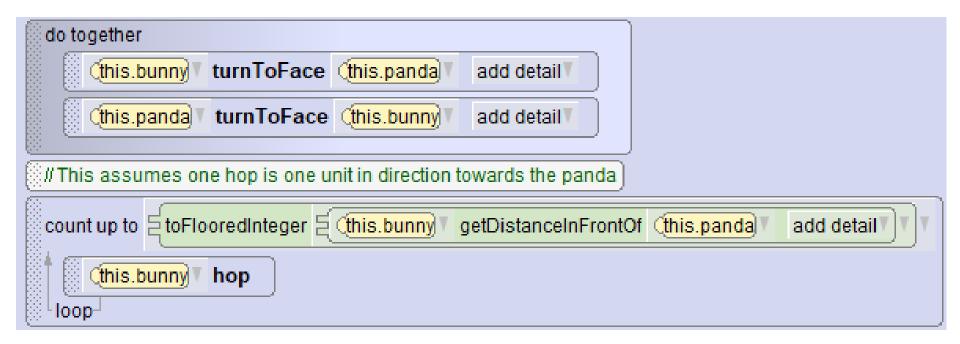
More detail on Count with function (cont)

• Third: Drop built-in function over decimal number

```
count up to toFlooredInteger this.bunny getDistanceInFrontOf this.panda add detail toFlooredInteger this.bunny petDistanceInFrontOf this.panda add detail toFlooredInteger this.bunny petDistanceInFrontOf this.panda add detail toFlooredInteger to
```

More detail on Count with function (cont2)

 All the code (must make sure bunny and panda facing each other in order to use getDistanceInFrontOf)



Class Today

- Create talented bunny can walk
- Create talented dalmatian jump with legs stretched
- Save them out and put them in another Alice project





