Arrays

- What is an array?
  - A group of similar objects
  - Examples: All flyers, all decimalNumbers, all SJointedModel
- Why create an array?
  - Can have just one instruction for every item in the array
  - Less code
- Can an object be in more than one array?
  - Yes!
How and Where does one create an array?

- Create as a Scene Property
- Go to bottom of page and add there.

Example – Build array of Flyers

- Be sure to check box by “is array”
- Must add Objects into the array

Result

What is the order the birds do something here?

- Move their wings in this order: Phoenix, chicken, flamingo, penguin, ostrich, then same order again
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What does this code do?

- The birds turn red one at a time. Then at the same time they all turn blue.

What does this code do?

- Phoenix says greetings one at a time.
- Then Penguin says the greetings all at once.
What does this code do?

- Each bird in the array lotsOfBirds, one at a time, says the phrases in the array greetings, one at a time.
What does this error mean?

• This name already exists. You must use a different name for each loop!

BE CAREFUL!

• When naming loop variable
  – Don’t use the name of anything else in your program.
    • Don’t use penguin, etc.
    • Use someBird, someBird2, someBird3
• Don’t CUT and PASTE ARRAY LOOP code
  – This can lead to using a variable from the wrong loop. Your Alice code will freeze!

Announcements

• QZ13 and Videos for next time
Class Today

• Iterating through Arrays