

CompSci 94

Arrays, Loops with Arrays

October 17, 2024



Prof. Susan Rodger

Announcements

- QZ and Videos for next time
- Assignment 4 out today, due Tue, Oct 29
- Exam 2 Thur. Oct 24
 - See old tests on calendar page on Oct 24 date

Exam 2 Logistics

- Exam 2 is on Tuesday, Oct 24
- Covers topics through today, Oct 17 lecture
- Old tests are on the calendar web page
- Exam 2 is on paper
- See Exam 2 reference sheet – part of exam
- Exam 2 is your own work
- Bring only pen or pencil

Exam 2 Topics

- Topics from last time (procedures with parameters, etc)
- Random numbers
- if statements, logic (and, or, not)
- count loops, constant variables, Saving objects
- while loops
- Arrays, as a variable
- Scene procedure

Review Randomness

- How do you generate a random number?
- How do you store a random number?
- How do you use a random number?
- What other type of random can you create?

How to study for Exam 2

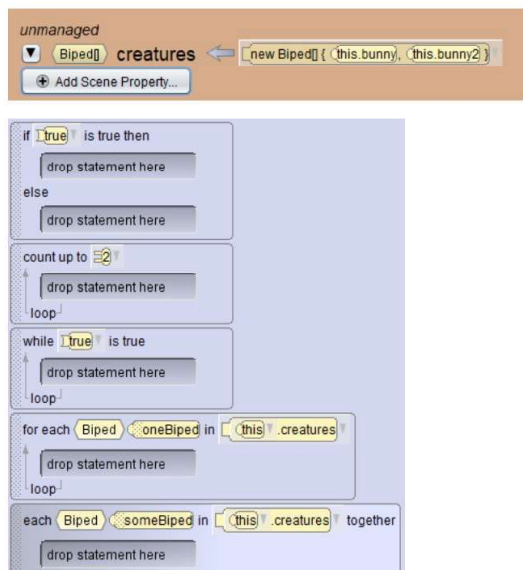
- You should practice writing code on paper!
 - Redo procedures we did in classwork or lecture
 - Start with blank sheet of paper and write code
- See old tests on course calendar page on 10/24 date
- Arrays – only understanding how to put them together and the two loops how they work

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5

If statement, loops and more

If, loops, and creating an array element.

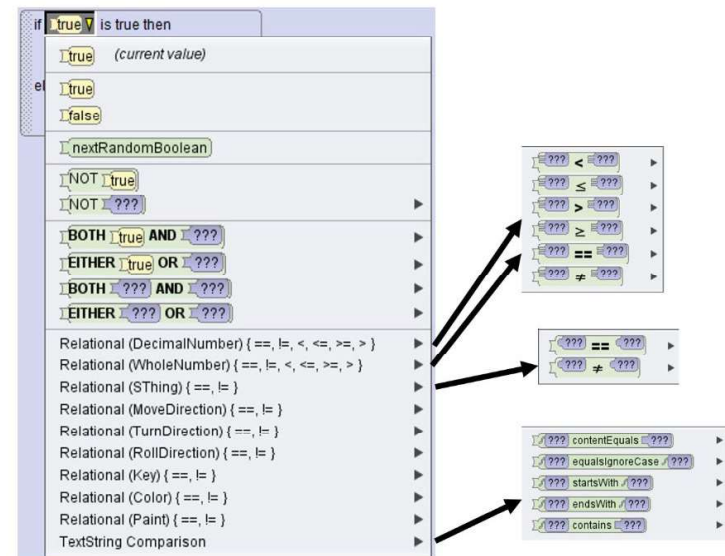


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8

if statement condition choices

Given below are the condition possibilities for an if statement



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9

Looping structures - when and how to use each one

- Count loop
- While loop

Now for today's topic - Arrays

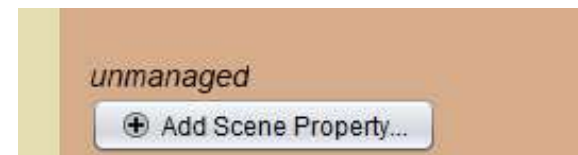
How and Where does one create an array?

How and Where does one create an array?

- Create as a Scene Property

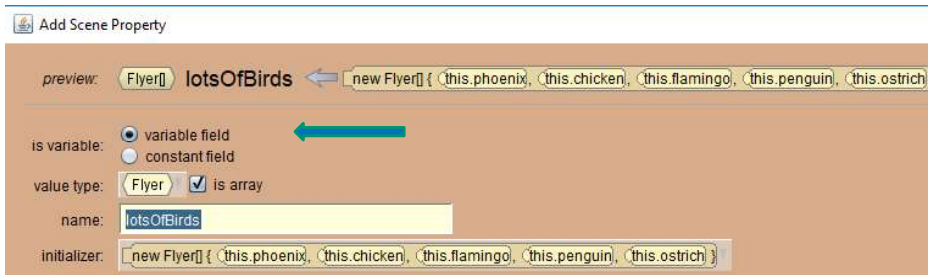


- Go to bottom of page and add there.



Example – Build array of Flyers

- Pick variable, not constant
- Pick type
- Be sure to check box by “is array”
- Name: pick name to reflect multiple things
- Initialize: add Objects into the array



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15

Result



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16

Q1. Arrays

- What is an array?
- Why create an array?
- Can an object be in more than one array?

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18

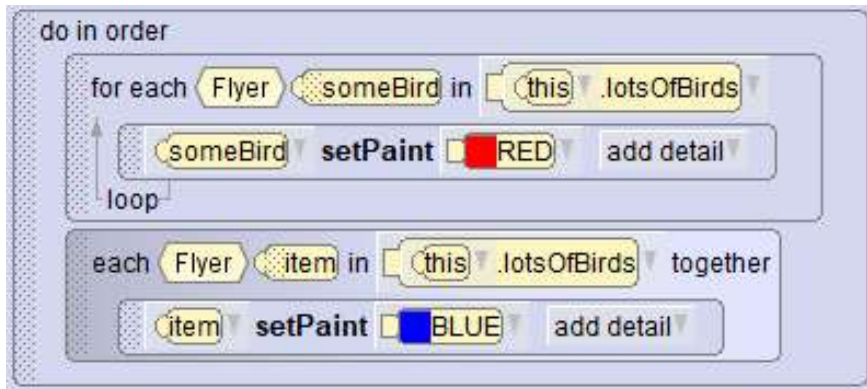
Q2. What is the order the birds do something here?



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20

Q3. What does this code do?



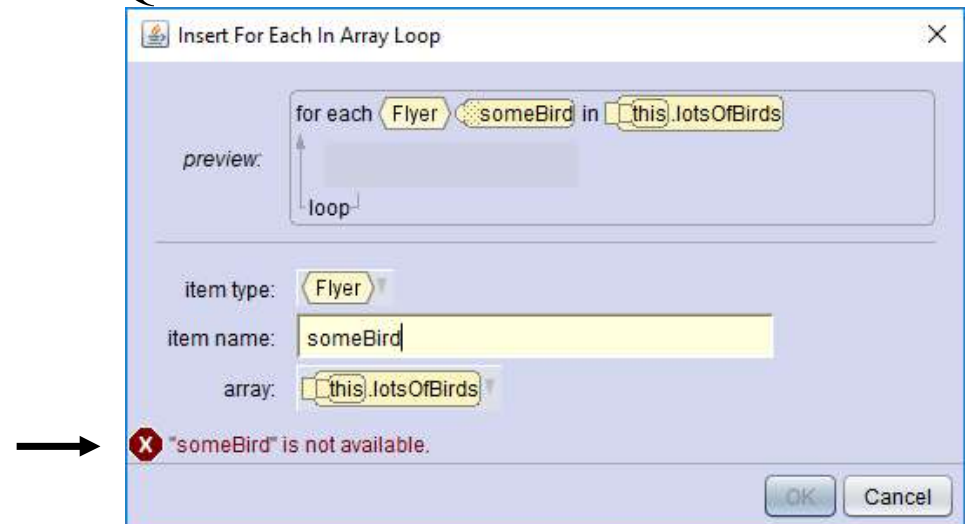
Q4. What does this code do?



Q5. What does this code do?



Q6. What does this error mean?



BE CAREFUL!

- When naming loop variable
- Don't CUT and PASTE ARRAY LOOP code