CompSci 94
Arrays, Loops with Arrays
October 19, 2021

Prof. Susan Rodger
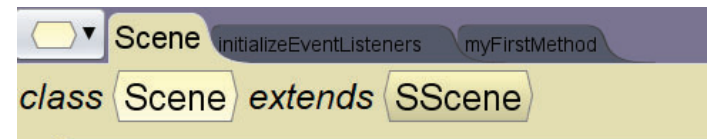

Announcements

- QZ and Videos for next time
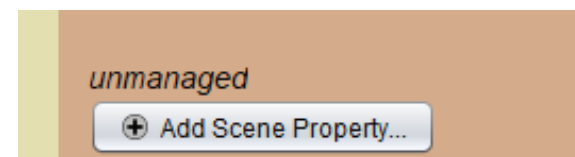- Assignment 4 out today, due Oct 28

How and Where does one create an array?

How and Where does one create an array?

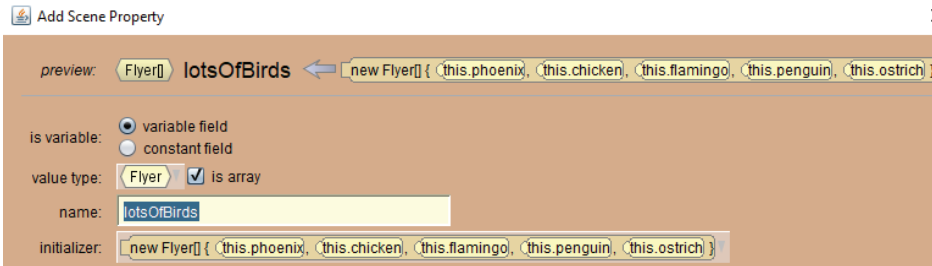- Create as a Scene Property

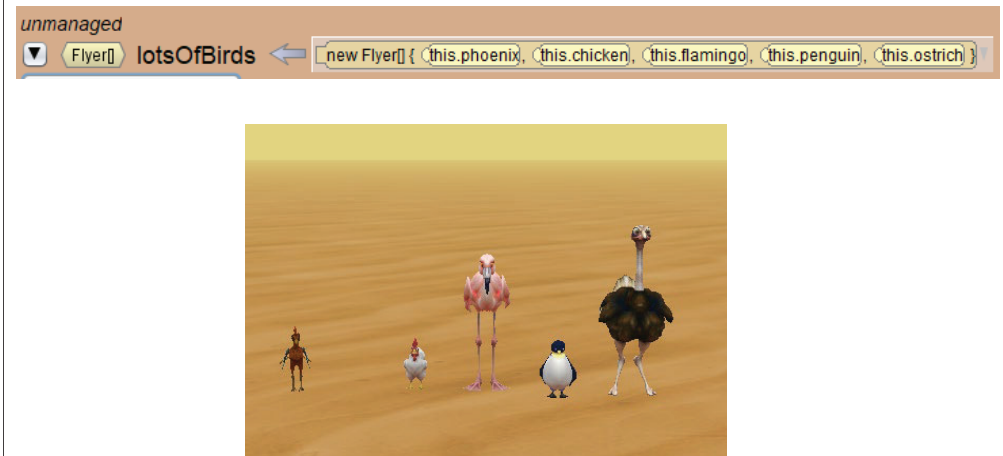- Go to bottom of page and add there.

Example – Build array of Flyers

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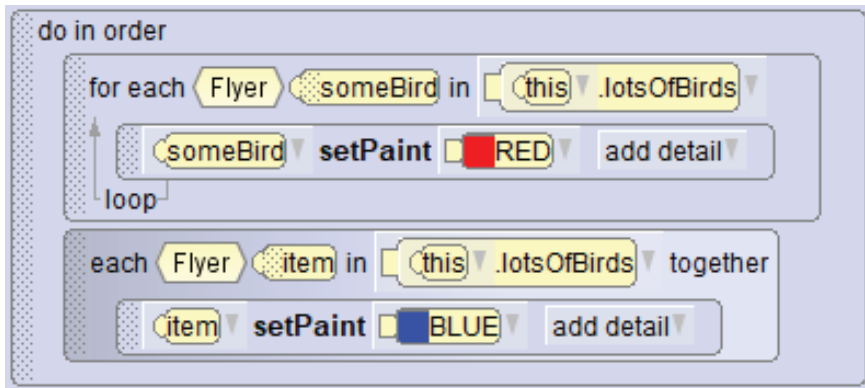- Must add Objects into the array

Result

Q1. Arrays

- What is an array?

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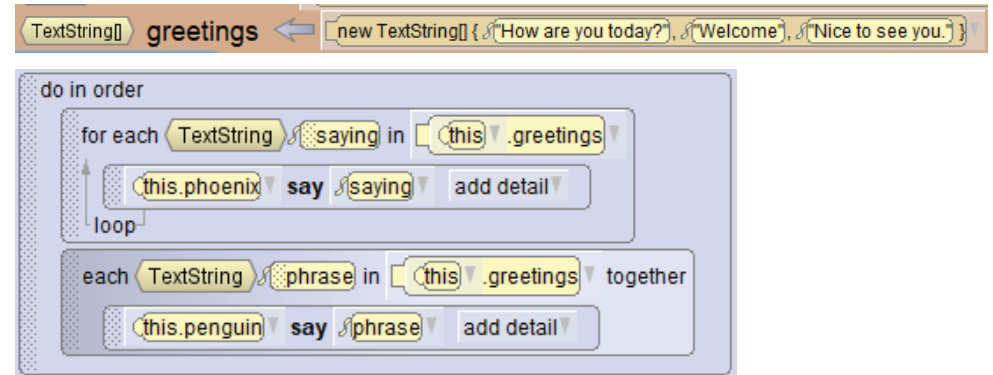
- Can an object be in more than one array?

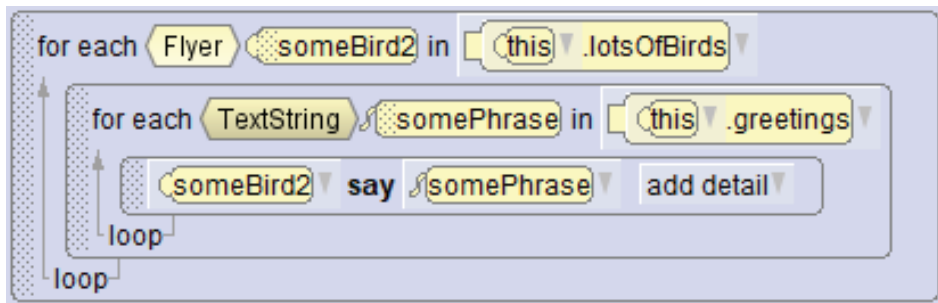# Q2. What is the order the birds do something here?
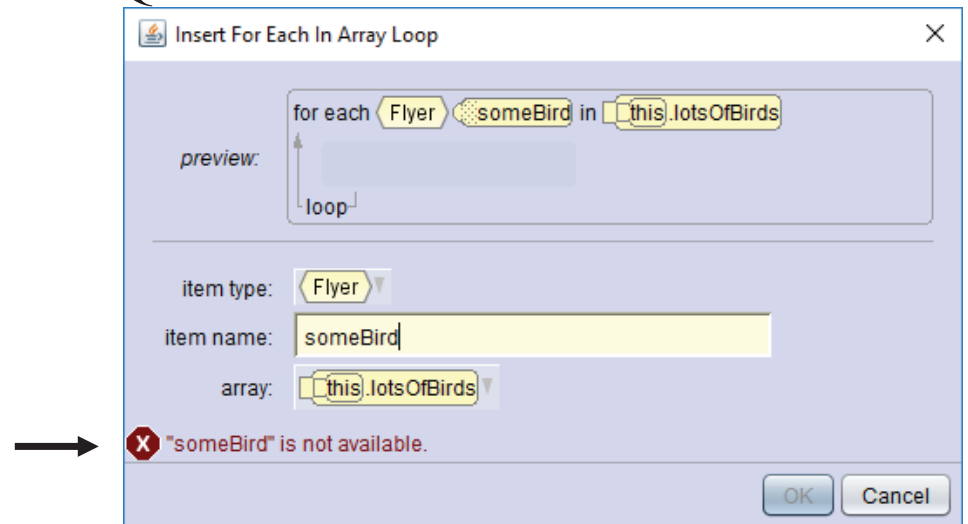
Q3. What does this code do?

```
do in order
  for each ( Flyer )  someBird in [ this .lotsOfBirds ]
      someBird  setPaint  [■RED]   add detail
  loop

  each ( Flyer )  item in [ this .lotsOfBirds ]  together
      item  setPaint  [■BLUE]   add detail
```

Q4. What does this code do?

```
TextString[]  greetings  ⟵  new TextString[] { "How are you today?", "Welcome", "Nice to see you." }

do in order
  for each ( TextString ) saying in [ this .greetings ]
      this.phoenix  say  saying   add detail
  loop

  each ( TextString ) phrase in [ this .greetings ]  together
      this.penguin  say  phrase   add detail
```

Q5. What does this code do?

```
for each ( Flyer )  someBird2 in [ this .lotsOfBirds ]
    for each ( TextString ) somePhrase in [ this .greetings ]
        someBird2  say  somePhrase   add detail
    loop
  loop
```

Q6. What does this error mean?

Insert For Each In Array Loop   ✕

preview:
```
        for each ( Flyer )  someBird in [ this .lotsOfBirds ]

        loop
```

item type: (Flyer)
item name: someBird
array: [this .lotsOfBirds]

❌ "someBird" is not available.

[OK] [Cancel]

BE CAREFUL!

- When naming loop variable

- Don't CUT and PASTE ARRAY LOOP code

Class Today

- Iterating through Arrays