## CompSci 94 Review for Exam 2 November 11, 2021

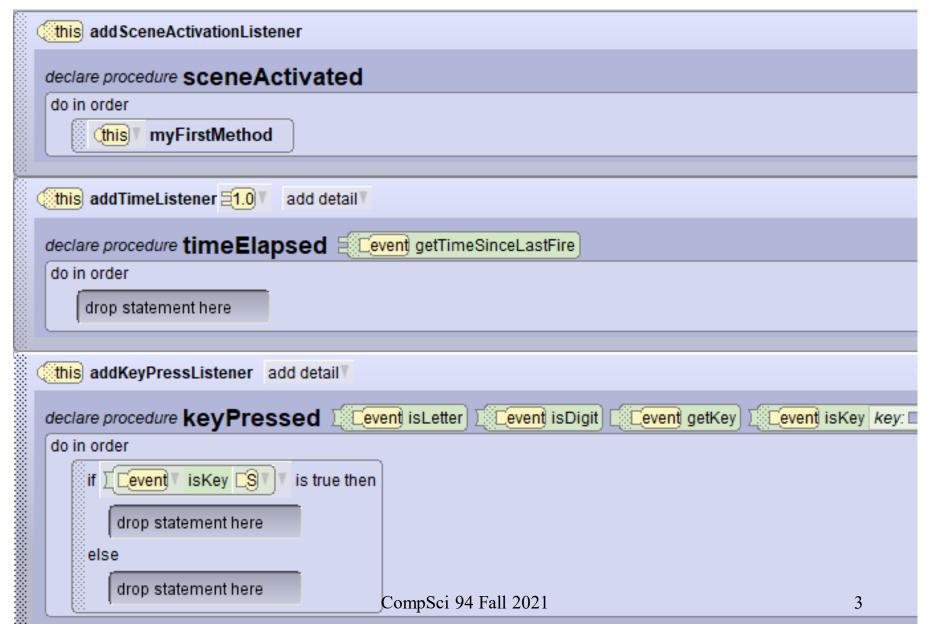


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### Class Today

- Review for Test 2 Test is Tuesday, Nov 16
- Look at old Test 1's and Test 2's.
  - Lot of reading code, some writing code
  - On old Alice 3 Test 2's ignore problem 1 on
     Spring 18 and Fall 18 Test 2 we did not do the event pointOfViewChanged
- Old quizzes back up later today

### Events 1



#### Events 2

```
this addMouseClickOnObjectListener, setOfVisuals [new Visual] { (this.bunny, (this.panda), (this.panda2), (this.panda3) }
                                                                                                                    declare procedure mouseClicked Elevent getScreenDistanceFromLeft Elevent getScreenDistanceFromBottom
                                                                                                                  _event getModelAt
    do in order
               event getModelAtMouseLocation ==
                                                    (this.panda)
                                                                   is true then
            drop statement here
         else
            drop statement here
    this addCollisionStartListener [new SThing[] { (this.bunny } \, [new SThing[] { (this.panda), (this.panda2), (this.panda3) }
                                                                                                                   declare procedure collisionStarted Cevent getSThingFromSetA Cevent getSThingFromSetB
    do in order
        drop statement here
      this addDefaultModelManipulation
```

## Events – when does it start, how does it work?

sceneActivated

addTimeListener

keyPressed

Events – when does it start, how does it work? (part 2)

• addMouseClickOnObjectListener

addCollisionStartListener

Events – when does it start, how does it work? (part 3)

• defaultModelManipulation

# How do you create a Scorer (or counter)

A scorer/counter

## How do you create A Countdown Timer

Looping structures - when and how to use each one

Count loop

• While loop

Looping in Array – when and how to use each one

• For each in

• Each in together

Indexing loop

#### 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?

## Arrays

• How do you create an array?

• Where should you create an array?

• How do you access a value in an array?

• What is the advantage of using an array?

• How do you find the position of the first red animal in an array?

Problem: Given an array of pandas named **pandas**. Double the size of every other one starting with the second one in the array, one at a time

# How do you force events to only happen at certain times?

### How to study for the exam

- Practice problem solving
- Redo a classwork, or a procedure or function for a classwork
- Try redoing something from a lecture
- Rewatch videos, redo online quizzes
- Understand topics reread over lecture notes
- Look at old Alice 3 test 1's and old test 2's
- Old Alice 2 tests think, how would I do this in Alice 3