

CompSci 94

A game with two levels

November 17, 2022



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CompSci 94 Fall 2022

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Announcements

- Assignment 5 is due tonight
- Assignment 6 (Final project) is out – see deadlines on Assignment page

- Exam 3 is Nov 29
 - See exam 3 study materials on Nov 29 date on our calendar page
 - Some review today, some next time

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Exam 3 Logistics

- Exam 3 is on Tuesday, Nov 29
- Covers topics through today, Nov 17 lecture
- Old tests are on the calendar web page
- Will put up old Sakai quizzes
- Exam 3 is on paper
- See Exam 3 reference sheet – part of the exam
- Exam 3 is your own work
- Bring only a pen or pencil

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Exam 3 topics

- Topics from last time (loops, arrays, ifs, procedures, parameters, etc)
- Array index loops (see penguin classwork)
- Writing functions
- Event programming

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Events 1

```
this addSceneActivationListener
declare procedure sceneActivated
do in order
  this myFirstMethod

this addTimeListener 1.0 add detail
declare procedure timeElapsed Event getTimeSinceLastFire
do in order
  drop statement here

this addKeyPressListener add detail
declare procedure keyPressed Event isLetter Event isDigit Event getKey Event isKey key:
do in order
  if Event isKey S is true then
    drop statement here
  else
    drop statement here
```

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Events 2

```
this addMouseClickedObjectListener, setOfVisuals new Visual[] { this.bunny, this.panda, this.panda2, this.panda3 } add detail
declare procedure mouseClicked Event getScreenDistanceFromLeft Event getScreenDistanceFromBottom Event getModelAt
do in order
  if 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 } add detail
declare procedure collisionStarted Event getSThingFromSetA Event getSThingFromSetB
do in order
  drop statement here

this addDefaultModelManipulation
```

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

- sceneActivated
- addTimeListener
- keyPressed

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

- addMouseClickedObjectListener
- addCollisionStartListener

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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 in Array – when and how to use each one

- For each in

- Each in together

- Indexing loop

Q1) Given an array of pandas, how do I create an array of objectMarkers that match the pandas in the same order



```

Custom Array >
preview: new Panda[] (this.panda, this.panda2, this.panda3)
type: Panda[]
value: [0] this.panda
       [1] this.panda2
       [2] this.panda3
       add ▼
    
```

Q2) Given pandas moved, what type of loop do you use to get them all back to their objectMarkers?



Q3) Given pandas moved, explain in words how to get them all back to their objectMarkers?



Q4: If we want to play a two level game, what might be the best game flow?

Class Today

- Build game with two levels

