CompSci 94
KeyPressListener, Collision Listeners
November 4, 2021

Prof. Susan Rodger

Announcements

- Assignment 5 is due Thursday, November 11

- Watch videos and online quiz for Tuesday

- Exam 2 is November 16

Q1: How do I get the hare to turn around?

Q2: What happens if I press letter A?
If I press the letter T?

Q3: What happens if press letter A? If press letter T?

```
this addKeyPressListener  add detail

declare procedure keyPressed  event isLetter  event isDigit
do in order
    if  event  isLetter  is true then
        this.pig  turn  RIGHT , 1.0  add detail
    else
        if  event  isKey  T  is true then
            this.panda  turn  RIGHT , 1.0  add detail
        else
            drop statement here
```

CompSci 94 Fall 2021   7

Q4: What does Combine and Fire_Multiple do?

```
this addKeyPressListener, multipleEventPolicy COMBINE , heldKeyPolicy FIRE_MULTIPLE

declare procedure keyPressed  event isLetter  event isDigit  event getKey
do in order
    if  event  isKey RIGHT  is true then
        this.whiteRabbit  move  RIGHT , 0.25  add detail
    else
        if  event  isKey UP  is true then
            this.whiteRabbit  move  FORWARD , 0.25  add detail
        else
            drop statement here
```

CompSci 94 Fall 2021   9

Q5: What happens when …

```
this addCollisionStartListener  this .bunnies , new SThing[] { this.whiteRabbit, this.panda }

declare procedure collisionStarted  event getSThingFromSetA  event getSThingFromSetB
do in order
    this.whiteRabbit  turn  RIGHT , 1.0  add detail
```

a) panda collides with a bunny?

b) whiteRabbit collides with a bunny?

Note: bunnies is an array of bunnies

11

CompSci 94 Fall 2021

Q6: What happens when

a) panda collides with a bunny?
b) whiteRabbit collides with a bunny?
c) pig collides with a bunny?
d) whiteRabbit collides with panda?

```
this addCollisionStartListener  this .bunnies , new SThing[] { this.whiteRabbit, this.panda }

declare procedure collisionStarted  event getSThingFromSetA  event getSThingFromSetB
do in order
    if  event  getSThingFromSetB  ==  this.whiteRabbit  is true then
        this.whiteRabbit  say  "hello"  add detail
    else
        if  event  getSThingFromSetB  ==  this.panda  is true then
            this.panda  say  "hello"  add detail
        else
            this.pig  say  "hello"  add detail
```

Q7: Clicking on an array object

- There is an array of bunnies. When a bunny collides with panda, you want the bunny that collided with the panda to say hello and turn around once.

- Why doesn't this code work?

```
this addCollisionStartListener  new SThing[] { this.panda } ,  this .bunnies   add detail

declare procedure collisionStarted  event getSThingFromSetA   event getSThingFromSetB
do in order
    this.bunny4  say  "hello"   add detail
    this.bunny4  turn  RIGHT ,  1.0   add detail
```

Class Today

- A game with collisions