CompSci 94 KeyPressListener, Collision Listeners November 15, 2022



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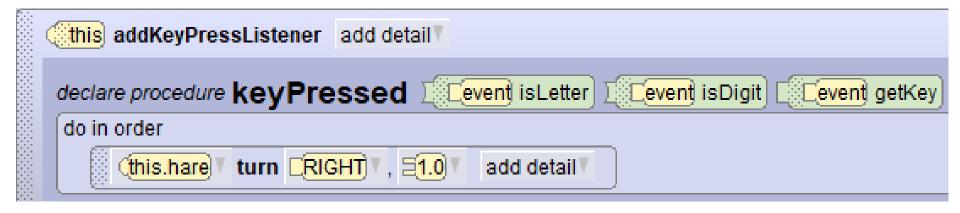
Announcements

- Assignment 5 is due Thursday, November 17
- Assignment 6 out, has several deadlines

Watch videos and online quiz for Thursday

- Exam 3 is November 29, after Thanksgiving
 - Study materials on Nov 29 date on our calendar

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



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

```
this addKeyPressListener add detail
   declare procedure keyPressed [ event isLetter [ event isDigit
   do in order
            event isLetter ▼
                             is true then
             (this.pig) v turn □RIGHT v, ≡1.0 v
                                              else
            drop statement here
        if ☐ cevent ▼ isKey cT ▼
                                 is true then
             (this.panda) ▼ turn □RIGHT) ▼, =1.0 ▼
                                                 add detail
        else
            drop statement here
```

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 1 |
                                   is true then
              (this.panda) ▼ turn □RIGHT) ▼, ≡1.0 ▼
                                                   add detail
         else
             drop statement here
```

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
         event iskey RIGHT
                                   is true then
            (this.whiteRabbit ▼ move □RIGHT ▼ , ≘0.25 ▼
                                                     add detail
        else
               is true then
                (this.whiteRabbit ▼ move FORWARD ▼, 50.25) ▼
                                                             add detail
           else
               drop statement here
```

Q5: What happens when ...

```
this addCollisionStartListener this v.bunnies v, [new SThing[] { (this.whiteRabbit, (this.panda) } v a declare procedure collisionStarted [event] getSThingFromSetA [event] getSThingFromSetB do in order [this.whiteRabbit] v turn [RIGHT] v, [1.0] v add detail v
```

a) panda collides with a bunny?

b) whiteRabbit collides with a bunny?

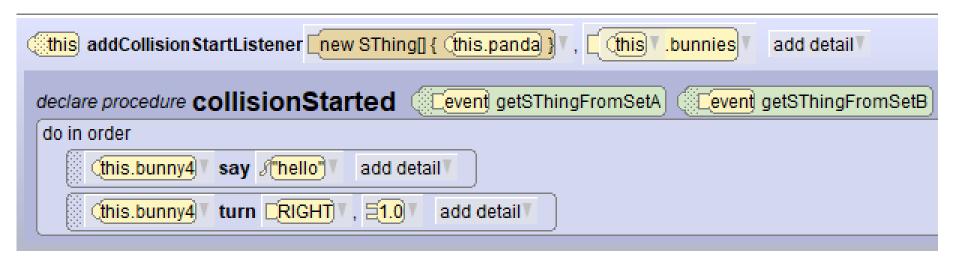
Note: bunnies is an array of bunnies

- Q6: What happens when
- a) panda collides with a bunny?
- b) white Rabbit collides with a bunny?
- c) pig collides with a bunny?

whiteRabbit collides with panda? C this addCollisionStartListener (this) .bunnies , [new SThing] { (this.whiteRabbit, (this.panda) } declare procedure collisionStarted (Event getSThingFromSetA) Eevent getSThingFromSetB do in order getSThingFromSetB V == (this.whiteRabbit) is true then this.whiteRabbit say / hello add detail else getSThingFromSetB ▼ **==** (this.panda is true then this.panda say Thello V add detail else this.pig say I 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?



Class Today

• A game with collisions

