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?

```plaintext
declare procedure keyPressed

do in order
    this.hare turn RIGHT, 1.0 add detail
```

• Press any key and the hare will turn around
Q1: How do I get the hare to turn around?

• Press any key and the hare will turn around

• Not a good way to do this. Can’t use any other keys for anything else.
Q2: What happens if I press letter A? If I press the letter T?
Q2: What happens if I press letter A? If I press the letter T?

- Letter A – pig turns
- Letter T – pig turns, then panda turns

- Letter A – pig turns once
- Letter T – pig turns once
Q4: What does Combine and Fire_Multiple do?
Q4: What does Combine and Fire_Multiple do?

- Hold the key down and the whiteRabbit moves a lot faster until you release the key!
Q5: What happens when …

a) panda collides with a bunny?

b) whiteRabbit collides with a bunny?

Note: bunnies is an array of bunnies
Q5: What happens when …

a) panda collides with a bunny?  
    WhiteRabbit (W.R.) turns right

b) whiteRabbit collides with a bunny?  
    whiteRabbit turns right

Note: bunnies is an array of bunnies
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?
Q6: What happens when
a) panda collides with a bunny?  \(\text{Panda says hello}\)
b) whiteRabbit collides with a bunny?  \(\text{W.R. says hello}\)
c) pig collides with a bunny?  \(\text{Nothing happens}\)
d) whiteRabbit collides with panda?  \(\text{Nothing happens}\)
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?
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?

Bunny4 says and turns
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.

• Can you change the code to this?
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.

• Can you change the code to this?  NO!
Why not?

• This code: ![Image](event_getSThingFromSetB)
  – Is an Sthing so you CANNOT drop it over a type bunny

• Instead, you have to look through the bunny array and compare each bunny with an Sthing. When you find the bunny that was clicked on, then you just refer to that bunny
Find bunny clicked on in array

- Write a loop to iterate through the bunny array, for each bunny in the array, check to see if it is the item clicked on.
Find bunny clicked on in array

• Write a loop to iterate through the bunny array, for each bunny in the array, check to see if it is the item clicked on.
Find bunny clicked on in array

- Write a loop to iterate through the bunny array, for each bunny in the array, check to see if it is the item clicked on.

Have someBunny do things if it matches
Find bunny clicked on in array

- Write a loop to iterate through the bunny array, for each bunny in the array, check to see if it is the item clicked on.

FINAL CODE
Class Today

• A game with collisions