CompSci 4
Chap 9 Sec 2
Nov 1, 2007

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Announcements

- Read Chapter 10 for next time
  - Section 1 – variables
  - Section 2 – Arrays
  - Reading Quiz
- Assignment 6 due Tuesday

- Today
- Chapter 9, Sec 2 – Searching Lists
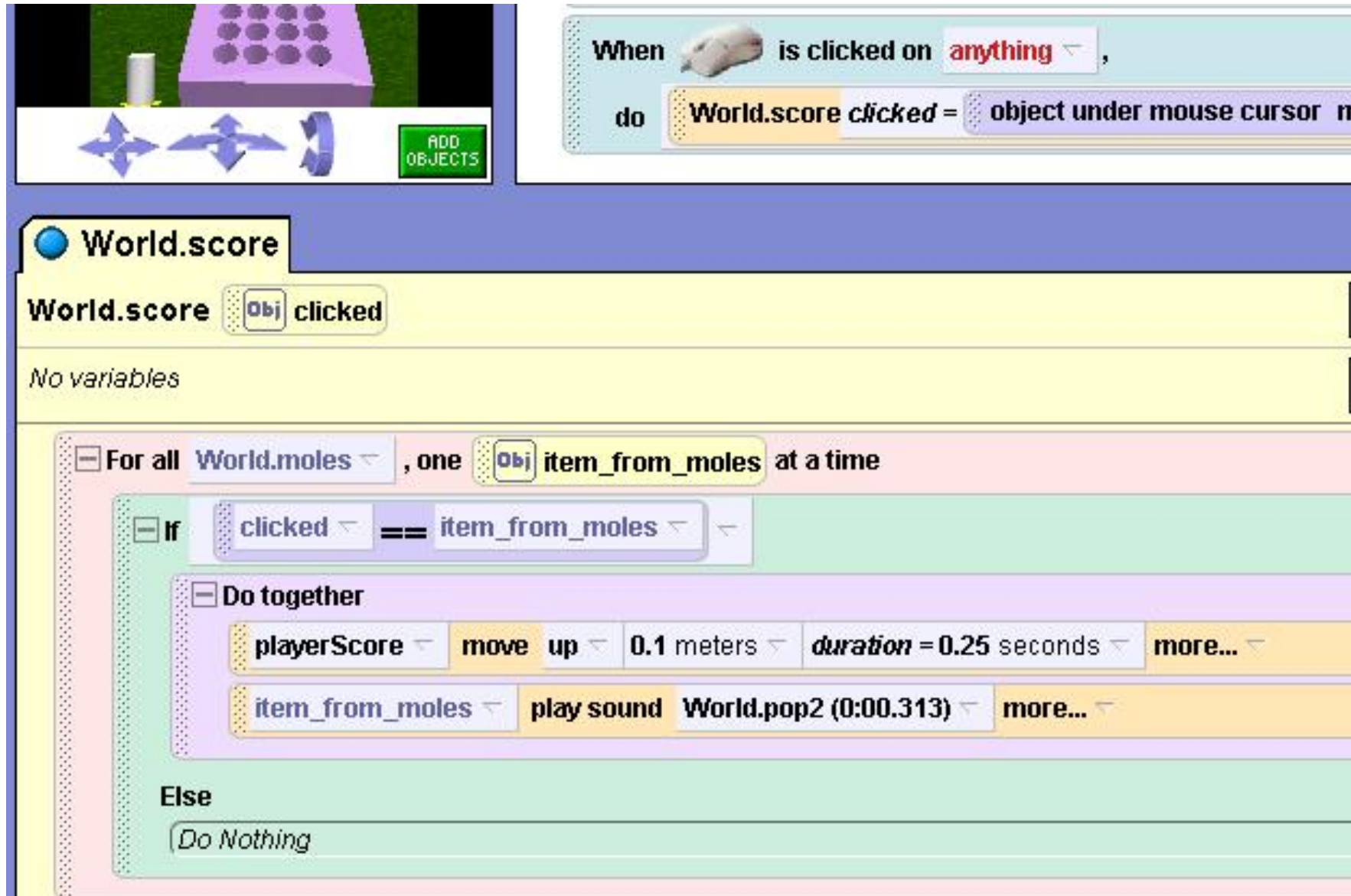
Questions on Assignment 6?

List Search Example

- WacAMole game

- Moles pop up from holes, user tries to whack (click) them

- Game over when 10 moles whacked.

Score – uses "For all in order"

When [mouse] is clicked on anything ,

do   World.score *clicked* = object under mouse cursor m

○ **World.score**

World.score | Obj | clicked

No variables

For all World.moles , one | Obj | item_from_moles at a time

If clicked == item_from_moles

Do together

playerScore move up 0.1 meters *duration* = 0.25 seconds more...

item_from_moles play sound World.pop2 (0:00.313) more...

Else

Do Nothing

Other Methods

World.my first method *No parameters*

No variables

□ While   not   playerScore ▽   is above ground ▽   more... ▽ ▽   ▽

    World.popMole *whichMole* =   random item from   World.moles ▽   ▽

World.popMole Obj whichMole

No variables

□ Do in order

    whichMole ▽   move up ▽   0.8 meters ▽   *duration* = 0.25 seconds ▽   more... ▽

    Wait 0.5 seconds ▽

    whichMole ▽   move down ▽   0.8 meters ▽   *duration* = 0.25 seconds ▽   more... ▽

Classwork today – sort animals

Start

Put Tallest two in place …
(move to rightmost tennis balls)

All in place!

More Details

- *Given* a list of animals, list of tennis balls
  - Each player has "isTaken" variable set to false
  - Each ball has color yellow
- *Write* methods to find the rightmost yellow tennis ball – test these
- *Write* methods to find the tallest player not yet taken
- *Sort* the players by height - Repeatedly find the tallest player and move it to the rightmost yellow ball