CompSci 4
Review for Exam 2
November 15, 2011

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Announcements

• After test, Chapter 8.1 and reading quiz due in one week.
• Assignment 7 storyboard due today with partner name!
• Assignment 7 due in one week
• Extra office hours today Tues 1:15-2:45
• Wed office hours 10-12:15
Topics for the Exam

• No HTML
• Alice Chapters 1-2, 4-7, 9-10
  – Focus on Chap 5-7, 9-10
• Topics
  – Random numbers
  – Looping structures
  – Variables
  – If/else
  – Events
  – Lists
  – Arrays – Array Visualization and non-visual
Random Numbers

- Use a variable if need the number more than once
- Use “integer only” if you want an integer
- Use “random number” to generate random numbers
  - Maximum is “up to but not including”
  - Default values
Looping Structures

• Loop
  – Simple and complicated
• While
• When to use “while” vs. “if”
• BDE – similar to “while”
• “When something is true” event – similar to if
Conditionals – If/Else

• Format
  if (condition)
    do if true
  else
    do if false
• Nested ifs
• 3 Logical and 6 relational operators
• When do you use an “if” vs “while”
• When event
Variables

- Types
  - Local variable
  - Parameter
  - World variable
  - Class variable

- What do you do with a variable?
  - It stores a value
    - Initialize it
    - Use its value
    - Update it
Lists

• Create a list

• Process a list
  – For all in order
  – For all together
  – Item-in-list
  – Do something to a part of an object

• List search
Array

• Create an Array
• Process an array
  – Loop – complicated version
  – Use value from array
  – Set value in array
• Search for item in an array
• Array Visualization and nonvisual
How to Study for the Exam

• Write methods from old classworks
• Lecture notes
• Reading quizzes – will make available
• Reading in book
• Understand the topics
• Work problems from old tests