Announcements

• After test, Chapter 8.1 and reading quiz due in one week.
• Assignment 7 partner’s names due today.
• Assignment 7 storyboard and world due next week
• Extra office hours this week posted on piazza

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 – non-visual only
  – Arrays – ArrayVisualization(AV) and non-visual

Random Numbers

• 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

• Practice problem solving
• Write methods from old classworks
• Lecture notes
• Reading quizzes – not as helpful
• Reading in book
• Understand the topics
• Work problems from old tests – BEST WAY FOR PRACTICE, lots of old tests