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 – ArrayVisualization 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

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