CSc 110, Autumn 2017

Lecture 33: 2D Structures

Adapted from slides by Marty Stepp and Stuart Reges
Exercise

• We would like to store data for the class so that we can:
  • Access the entire class list easily
  • Access a section list easily

• What structure is appropriate for this problem?
  • Sometimes it can be helpful to store a structure inside another structure
What is the right structure?

- You want to store a bunch of colors so you can later choose one at random.
- Batting order of a baseball team.
- Students names and their grades on a project.
- Friends names and their phone numbers.
- Height, width and location of a sports field.
- Movies a person has watched.
- Items in a shopping cart.
- A student's grades.
What is the right structure?

• The grades for all students in a class
• All books in a store arranged by category
• Many recipes each containing many steps
• Phone numbers that have been called this month on a phone plan divided by area and country code for billing simplicity