

CSC 121 Review for Final

Classes: (1.1, 2.2-2.4, 3.7, 3.8, 3.9, 4.1, 4.9, Proj 1, Test 1, Test 2, Lab 2)

- Instance methods. (1.2, Lab 4)
- Class methods. (1.2, 2.1-2.4, 4.2, 4.5)
- Instance variables. (1.3, 3.1, 3.3, 4.4, Lab 3, Lab 4)
- Class variables. (1.3, 2.2-2.4, 3.1, 3.3, 4.4)
- Constructors. (4.2)
- Public and private visibility modifiers. (4.1, 4.3, Lab 4)

Organization of classes: (2.2-2.4, Test 1)

- Use of multiple classes in separate files. (2.2, 2.3, 2.4)
- Use of packages. (2.2, 4.8)

Objects: (1.1, 4.1, 5.4, Proj 1, Test 1, Test 2)

- Declaration and instantiation. (2.1, 4.1, Lab 3)
- Calling methods (message passing). (1.2, 2.1, 4.5, Lab 4)
- Parameter passing (variables versus objects). (4.4, 4.6, Lab 4, Lab 5)
- Return types for methods (void, variables, objects). (4.1, 4.4)

Basic data structures:

- Instantiation and manipulation of strings. (2.5, 9.1-9.2, 9.3*, Lab 2)
- Instantiation and manipulation of arrays. (10.1, 10.2, 10.3*, Proj 2)

Program control: (3.2, 3.4-3.6, 5.1-5.7, 6, Proj 1, Proj 2, Test 2, Lab 1, Lab 5)

- if statements. (5.1, 5.2, 5.3, Lab 5)
- switch statements. (5.5, Lab 5)
- while, do-while, and for loops. (6.1-6.7, Lab 6, Proj 2)
- exceptions. (8.1, 8.2, 8.3*, Lab 6)

Basic file manipulation:

- Opening, closing, and reading/writing files. (12.1, 12.2, 12.3*, Proj 2)

Introduction to Graphical User Interfaces (GUI) (5.6, 5.7, 7.1-7.5*, Proj 3*)

- Use of JFrame, containers, graphics, and basic graphics commands. (5.6, 5.7)
- Basic creation of windows, buttons, and other AWT objects. (7.1-7.5*)