

Midterm 1 Study Guide

CSC 360

Cheat Sheet: You may bring to the exam a single 12" x 8.5" sheet of paper with anything written or typed on it (front and back) that you think might be helpful.

Textbook Chapters:

Chapter 12: Exception Handling, Sections 1-9

Chapter 13: Abstract Classes and Interfaces, all sections

Chapter 14: JavaFX Basics, Sections 3-12 (with emphasis on Sections 11-12)

Chapter 15: Event-Driven Programming and Animations, all sections (with emphasis on Sections 6-8)

Format: The exam will emphasize more on Chapters 12-13 compared to 14-15. There will be a mix of multiple-choice questions, short questions, code explanations and output of code, and writing small code segments.

Chapter 12 – Exception Handling

Review Figure 12.1. Given such a figure, you should be able to pick out which classes represent *checked* exceptions and which represent *unchecked* exceptions. You should understand the differences between checked and unchecked exceptions. You should know how to declare, throw, and catch exceptions. You should also be able to write your own simple custom exception class. Review how a *finally* clause works.

Chapter 13 – Abstract Classes and Interfaces

Review the following concepts: abstract methods, abstract classes, interfaces, interfaces vs. abstract classes, numeric wrapper classes, the Comparable and Cloneable interfaces, shallow copy versus deep copy. Review the Rational class.

Chapter 14 – JavaFX Basics

Understand the concepts and components for creating visual objects. Given some code that adds shapes to a pane, be ready to draw what the shapes will look like. Review the examples from the slides.

Chapter 15 - Event- Driven Programming and Animations

Understand the concept of listeners and events. Be able to translate code that uses external event listener classes to code that uses lambda expressions. Review the examples from the slides.

You may practice the relevant CheckPoint questions from the above chapters. Answers to all of the CheckPoint Questions can be found at cs.armstrong.edu/liang/intro10e/solution.html.