Overview of Week 10

#	Date	Lectures	iPad Notes	Study Materials
10	WED, Nov 18 to TUE, Nov 24	▶️ **Playlist for Week 10** (≈ 3 hours) • Lecture 10 - Introduction and Overview of Week 10 • Lecture 10a - Part 1a: Require Less vs. Require More • Lecture 10a - Part 1b: Ensure Less vs. Ensure More • Lecture 10a - Part 2a: Inheritance & Contracts - Static Analysis • Lecture 10a - Part 2b: Inheritance & Contracts - Examples • Lecture 10a - Part 3: Inheritance & Contracts - Runtime Checks • Lecture 10b - Part 4: Two Design Attempts for Recursive Systems • Lecture 10b - Part 5: Multiple Inheritance • Lecture 10b - Part 6: Composite Design Pattern	📓 INTRO 📓 PRE 📓 POST	• <u>Slides</u> ▪ Lecture 10a: Subcontracting ▪ Lecture 10a: Subcontracting [4up] ▪ Lecture 10b: Composite Design Pattern ▪ Lecture 10b: Composite Design Pattern [4up] • <u>Diagrams</u> ▪ Design Architecture: Subcontracting ▪ Design Diagram: Composite Design Pattern ▪ Design Diagram: Multiple Instantiations of Composite Pattern • <u>Questions?</u> ▪ Post Your Questions in this Document. • <u>Source Code</u> ▪ Contract Redeclaration (**Supplementary to Slides**) ▪ Composite Design Pattern

Learning Objectives of Week 10

- Subcontracting: Static Analysis vs. Dynamic Checks
- Recursive Systems – Base Cases vs. Recursive Cases
- Design Attempt 1: Violating Cohesion
- Design Attempt 2: Violating Single Choice Principle
- Multiple Inheritance
- Design Attempt 3: Composite Design Patrern

Milestones of Week 10

- Work on Project
- Complete Quiz9
- Start Lecture Series W10