

# Overview of Week 11

#	DATE	LECTURES	IPAD NOTES	STUDY MATERIALS
11	WED, Nov 25 to TUE, Dec 1	<p> <a href="#">▶ Playlist for Week 11 (≈ 2 hours)</a> ↓ 7 <i>tutorials. project lectures.</i> </p> <ul style="list-style-type: none"> <li>Lecture 11 - Introduction and Overview of Week 11</li> <li>Lecture 11 - Part 1: <u>First Design Attempt for Processing Recursive Systems</u></li> <li>Lecture 11 - Part 2: <u>Open-Closed Design Principle</u></li> <li>Lecture 11 - Part 3a: Visitor Design Pattern - <u>Architecture</u></li> <li>Lecture 11 - Part 3b: Visitor Design Pattern - <u>Runtime (Double Dispatch)</u></li> <li>Lecture 11 - Part 3c: Visitor Design Pattern - <u>Single Choice Principle</u></li> </ul>	<p>INTRO</p> <p>PRE</p> <p>POST</p>	<ul style="list-style-type: none"> <li>Slides <ul style="list-style-type: none"> <li>Lecture 11: Visitor Design Pattern</li> <li>Lecture 11: Visitor Design Pattern [4up]</li> </ul> </li> <li>Tutorials <i>(optional)</i> <ul style="list-style-type: none"> <li>Tutorial: <u>The Composite and Visitor Design Patterns</u></li> <li>Tutorial: <u>Using the ANTLR4 Parser Generator to Develop a Compiler (Practical Application of the Composite/Visitor Design Patterns in Java)</u>; iPad notes</li> </ul> </li> <li>Diagrams <ul style="list-style-type: none"> <li>Design Diagram: Visitor Design Pattern</li> </ul> </li> <li>Questions? <ul style="list-style-type: none"> <li><u>Post Your Questions in this Document.</u></li> </ul> </li> <li>Source Code <ul style="list-style-type: none"> <li><b>(Recommended)</b> Follow the above Tutorial on Composite/Visitor Patterns.</li> <li><b>(Advanced)</b> Follow the above Tutorial on Building a Language Compiler.</li> </ul> </li> </ul>

## Learning Objectives of Week 11

- Processing Recursive Systems
- Design Attempt 1: Violating Cohesion & Single Choice Principle
- Visitor Design Pattern: Architecture & Implementation
- Visitor Design Pattern: **Double Dispatch** at Runtime

## Milestones of Week 11

- **Work on Project**
- Complete Quiz10
- Start Lecture Series **W11**
- Optional Tutorial: Composite & Visitor
- Optional Tutorial: Building a Language Compiler