

Wrap-Up



EECS2030 B: Advanced
Object Oriented Programming
Fall 2019

CHEN-WEI WANG

What You Learned (1)



- *Procedural Programming in Java*
 - Exceptions
 - Recursion (implementation, running time, correctness)
- *Data Structures*
 - Arrays
 - Maps and Hash Tables

2 of 8

What You Learned (2)



- *Object-Oriented Programming in Java*
 - classes, attributes, encapsulation, objects, reference data types
 - methods: constructors, accessors, mutators, helper
 - dot notation, context objects
 - aliasing
 - inheritance:
 - code reuse
 - expectations
 - static vs. dynamic types
 - rules of substitutions
 - casts and `instanceof` checks
 - polymorphism and method arguments/return values
 - method overriding and dynamic binding: e.g., `equals`
 - abstract classes vs. interfaces

3 of 8

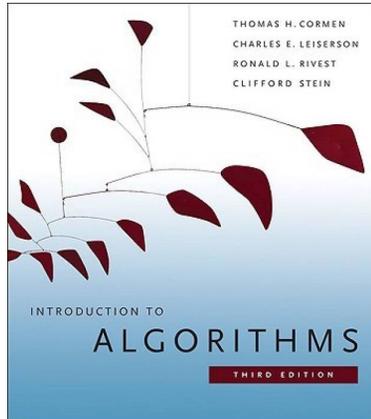
What You Learned (3)



- *Integrated Development Environment (IDE) for Java: Eclipse*
 - Break Point and Debugger
 - Unit Testing using JUnit

4 of 8

Beyond this course... (1)



- *Introduction to Algorithms (3rd Ed.)* by Cormen, *etc.*
- DS by DS, Algo. by Algo.:
 - **Understand** math analysis
 - **Read** pseudo code
 - **Translate** into Java code
 - **Write and pass** JUnit tests

5 of 8

Wish You All the Best

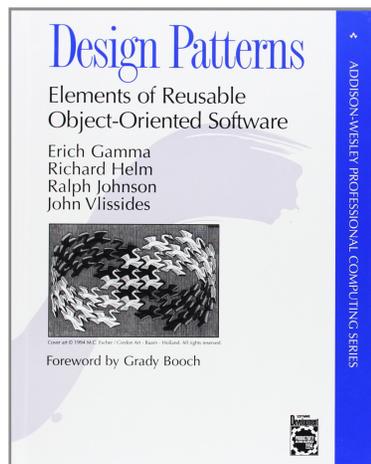


- What you have learned will be **assumed** in EECS2011.
- Logic is your friend: Learn/Review EECS1019/EECS1090.
- Do **not** abandon Java during the break!!
- Feel free to get in touch and let me know how you're doing :D
- Exam Review Sessions:

1pm to 3pm	Monday	December 9
12pm to 2pm	Tuesday	December 10
1pm to 3pm	Thursday	December 12

7 of 8

Beyond this course... (2)



- *Design Patterns: Elements of Reusable Object-Oriented Software* by Gamma, *etc.*
- Pattern by Pattern:
 - **Understand** the problem
 - **Read** the solution (not in Java)
 - **Translate** into Java code
 - **Write and pass** JUnit tests

6 of 8

Course Evaluation



Compliments or Complaints on my teaching?

<http://courseevaluations.yorku.ca/>

8 of 8