# Object-Oriented System Design Spring 2022

Prof. Choonhwa Lee

Dept. of Computer Science and Engineering Hanyang University

### Instructor

#### • Dr. Choonhwa Lee



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• (Tentative) Office hour: Mon 14:00-17:00 or by email appointments

## Teaching Assistant

• 김재하 조교 (Lab Sessions)



» Office: Rm #402-2 IT Bld

» Email: jehakim22oct@hanyang.ac.kr

» Office hour: TBD

• 이세정 조교 (Programming Assignments)



» Office: Rm #402-2 IT Bld

» Email: lshizheng199@gmail.com

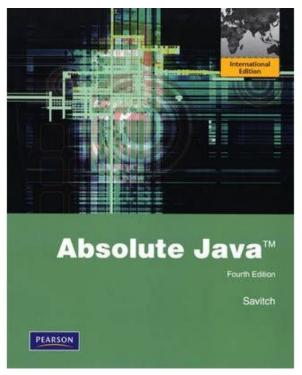
» Office hour: TBD

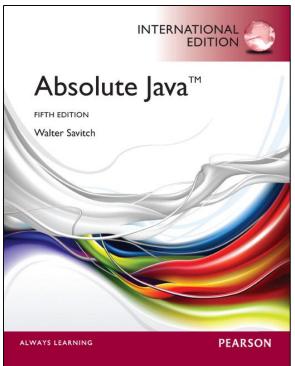
#### **Course Overview**

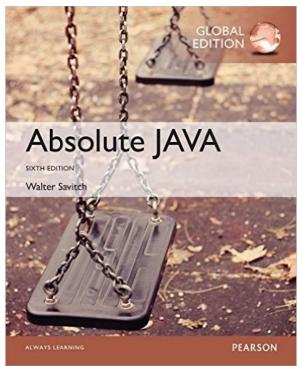
- OOP: Object-Oriented Programming
  - Encapsulation, inheritance, polymorphism, etc
  - Java programming language
- OOP Principles and Design Patterns
  - S.O.L.I.D.
  - Design patterns

## Textbook (Java)

- Absolute Java (4<sup>th</sup>/5<sup>th</sup>/6<sup>th</sup> edition), Walter Savitch
  - Pearson, 2009/2013/2016

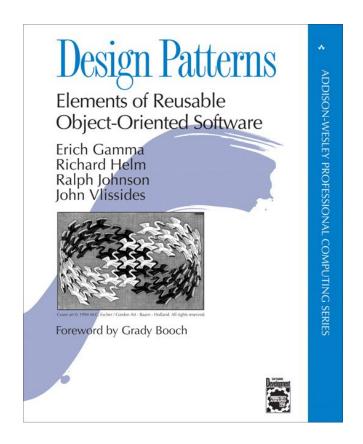


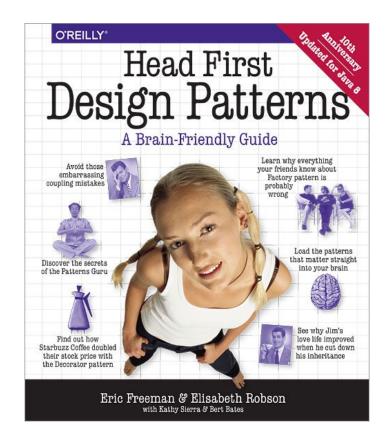




# Textbook (Design Patterns)

- Head First Design Patterns
  - eBook version available at http://www.slideshare.net





# Schedule (tentative)

Week	Lecture	Lab
1	Course Overview	Eclipse IDE
2	Getting Started (ch. 1) Console Input and Output (ch. 2)	+ Flow of Control (ch. 3)
3	Defining Classes I (ch. 4)	+ Git & GitLab
4	Defining Classes II (ch. 5)	+ UML
5	Defining Classes II (ch. 5)	
6	Arrays (ch. 6)	
7	Inheritance (ch. 7)	+ Quiz 1
8	Midterm exam	

<sup>\*</sup> Make-up classes are to take place 10:00 - 12:00 in the Saturday morning of the week, unless told otherwise.

# Schedule (tentative)

Week	Lecture	Lab
9	Polymorphism and Abstract Classes (ch. 8)	
10	Exception Handling (ch. 9)	+ File I/O
11	Interface and Inner Classes (ch. 13)	+ Java Thread
12	Generics and the ArrayList Class (ch. 14)	+ Quiz 2
13	Design Patterns: Intro, Singleton	
14	Design Patterns: Observer, Decorator	
15	Final Exam	

# Grading

- Class workload
  - Programming assignments: 3
  - In-class programming quizzes: 2
- Grade breakdown
  - Mid-term exam: 30% (0% 60%)
  - Final exam: 30% (0% 60%)
  - Attendance: 10%
  - Programming assignments & quizzes: 30%

## Rules and Policies

- Programming experience
  - B0 or higher grades in C Programming or equivalent classes
- No A+ grade for senior students
  - Separate grading group from the rest, if necessary
- In-class midterm & final exams
  - In-class exams are the only option being offered. Neither online nor take-home exams will be given.

## Rules and Policies

- F 학점 해당 사항
  - 부정행위 관련자 전원
    - 중간/기말 시험, 퀴즈, 프로그래밍 과제
  - 중간/기말 시험 무단 결시자
    - 불가피한 경우 사전 허락이 필수
  - 퀴즈/프로그래밍 과제가 극히 저조한 경우
    - 프로그래밍 과제 1/2 이상 미제출 시 (0점도 미제출로 간주)
  - 최소 출결 기준 미달
    - 불가피한 경우 사후 사유 증빙 필요
    - 지각 2회는 결석 1회 (지각은 수업 시작 후 15분까지)

## QnA

Questions, concerns, and suggestions?