SCE204: Object-Oriented Programming and Practice

Fall 2020

Instructor: Sangeun Oh

About Me

- Sangeun Oh (오상은)
  - Education
    - PhD in CS from KAIST, 2020
    - MS in CS from KAIST, 2014
    - BS in CS from Korea Univ., 2012

  - Professional Experiences
    - **Assistant Professor**, Department of Software and Computer Engineering, Ajou University, September 2020 - present
    - **Research Assistant Professor**, KAIST, Mar. 2020 – Aug. 2020
  - Research interests: **Mobile/IoT systems**
    - Multi-device collaboration
    - Resource sharing/management
    - Mobile networking

About Me

- Contact
  - Office: Paldal Hall #606 (팔달관 606호)
  - Homepage: https://sites.google.com/view/ohsang
  - Email: sangeunoh@ajou.ac.kr
  - Office hours: by appointments

Welcome aboard SCE204!

- AIMS/AjouBb registration code: F105 (2분반)
- Mandatory course
  - 5 hours/week, 4 credits
- Class schedule
  - Lecture: Tuesday C & Friday C (12:00pm – 13:30pm), Paldal Hall #309
  - Practice: Monday 17:00pm – 19:00pm, Paldal Hall #318
- Official language
  - Korean for lecture, English for material
- Acknowledgement
  - The lecture materials are built upon previous efforts of **Prof. Kiyeol Ryu and Prof. Sangyoon Oh**

Why Studying OOP?

- The world is made of ***objects***!
- **Object-Oriented Programming (OOP)**
  - A programming paradigm based on the concept of "**objects**"
  - A set of instructions ➔ A set of objects

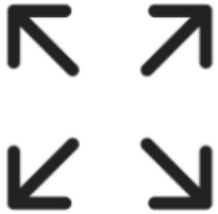
Bicycle = body + wheel + handle

- Benefits

Modeling

Maintenance

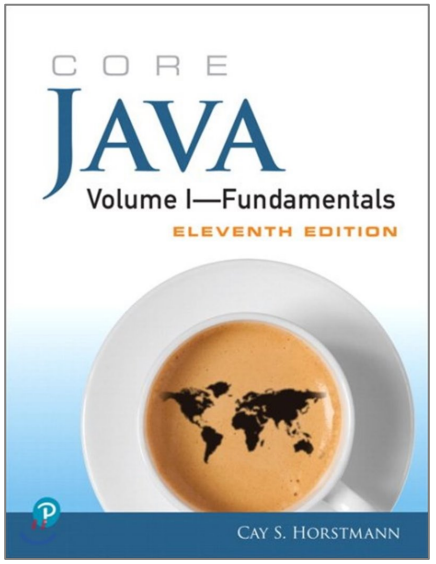
Reuse



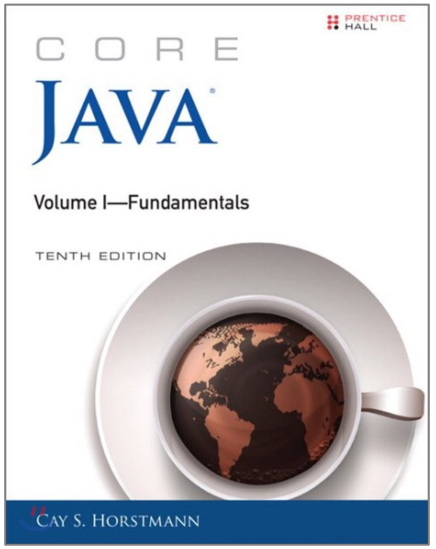
Extension

Textbook

- Core Java, 11th ed.
  - Cay S. Horstmann
  - Pearson Prentice Hall, 2018



- Core Java, 10th ed.
  - 2016



- Either edition works

Tentative Class Schedule

Week	Lecture	Note
1	Introduction	
2	Fundamental programming structures in Java	
3	Objects and Classes (1)	
4	Objects and Classes (2)	Project team organization
5	Inheritance	
6	Interfaces	
7	Lambda expressions	
8	Midterm exam	

Tentative Class Schedule

Week	Lecture	
9	Nested classes	
10	Exceptions	
11	Generic programming	
12	Collections framework	
13	File I/O	
14	GUI programming	
15	Swing	Project deadline
16	Final exam	

Class Logistics

- The class will be based on online lectures due to COVID-19
  - 1) Lecture videos (default) or 2) conference calls (announced before)
  - Practice time will always be done via conference calls like Zoom etc.
- Regularly check AjouBb for class materials and announcements
- Slides will be uploaded to AjouBb by the midnight of the lecturing day
  - Might be updated after the upload
- Don’t feel sorry or guilty to ask a question
  - Raise your hand ***at any time*** if you want to question about anything
  - Use Q&A forum in the AjouBb rather than emails

Grading Policy (subject to change)

- 10%: Class attendance
- 30%: Practice assignments
- 30%: Term project
- 30%: Exams
  - 15%: Midterm exam
  - 15%: Final exam

Class Attendance (10%)

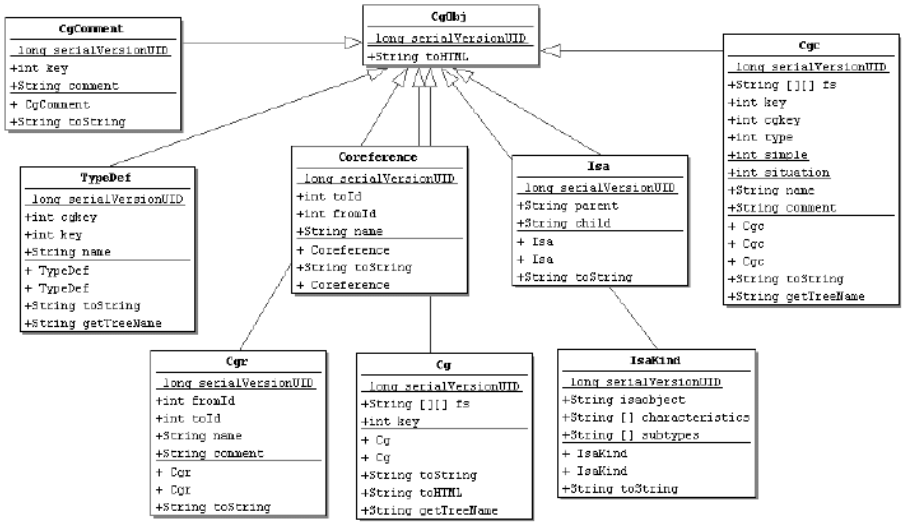
- Lecture attendance will be checked via **some quizzes**
  - You should upload your answer to AjouBb within two days of the lecture day
  - Low-quality answers are **NOT ACCEPTABLE**
- Practice attendance will be checked via conference calls
- You can skip up to **two** lectures without any penalty
  - Excluding excused absences and official matters
  - Excused absence should be notified **by e-mail in advance**
    - **Late notification will not be accepted by any means**
  - Starting from next week
- You will **fail** if you skip lectures more than or equal to 8 times
  - By the academic administration system without exception

Practice assignments (30%)

- Will be given 3~4 exercise problems at each practice time
- You need to submit your solution to AjouBb until every Friday 11:59pm

Term Project (30%)

- Develop a Java/Android application by using OOP concepts
  - Free topic project
  - Any new and useful application including graphical user interface
- 2~3 students can form a team
- You should submit 1) your program, 2) report, and 3) 1-min presentation video



UML diagram for OOP design

Exams (30%)

- Midterm 15% & Final 15%
- You will fail if get less than 1/10th of **total** points from either exams
  - Implies you will fail if you miss either exams

Ethical Code

- I believe you are all grown-up ladies and gentlemen, and willingly respect honor and fairness
- **Zero-tolerance policy** for any academic misconducts (NO MERCY!)
  - **F** for **project/exam cheating**
    - **Both source and copier**
    - For outsourced/purchased submissions
  - Will be reported to department office for further investigation

Ethical Code

- I believe you are all grown-up ladies and gentlemen, and willingly respect honor and fairness

Grading Policy

- All grades will be **final** except for my obvious mistakes
- Lame excuses will not be accepted for any reason
  - Scholarship, expulsion, graduation, internship, jobs, … → Study harder
  - Your grade may be demoted due to continuous lame excuses
    - e.g., B0 → C+
  - Notify me of your exceptional situation right away
- Students' overall behavior influences on the grade ranges

That’s all for today!