

**Computer Engineering Lab3: Java Programming**  
**SKKU CSE3043\_41**  
**Spring 2017**

**Instructor:** Hee Yong Youn, Rm 23424, 031-290-7147, [youn7147@skku.edu](mailto:youn7147@skku.edu)  
**TA:** (Main) Sangyoung Kim, Rm 83566, 031-299-6688, [imposoft@skku.edu](mailto:imposoft@skku.edu)  
(Sub) Cheng Wang, Rm 23403A, 031-290-7952, [lightingwang91@hotmail.com](mailto:lightingwang91@hotmail.com)  
(Sub) Hyunwoong Choi, Rm 23403A, 031-290-7952, [pooh0216@gmail.com](mailto:pooh0216@gmail.com)

**Office Hour:** Instructor: M 13:30 - 3:00 p.m. (or by appointment)  
TA: T 3:00 - 6:00 p.m.

**Lecture type:** English

**Objectives:** Java is a modern, object-oriented language, and it is the world's most widely used computer programming language. The major advantages of Java include the portability and use on the Internet. More than a billion general-purpose computers and billions more Java-enabled handheld devices are in use today. This course is to let you familiar with the powerful tasks of Java in commanding computers to perform desired tasks, and thus will be very important for application design and programming. Group project will also be conducted for consolidating the materials covered in the lectures and providing team work experience.

**Course Description:** This course introduces computer programming using the Java programming language with object-oriented programming principles. Topics covered include the Java programming language syntax, OO programming using Java, exception handling, file input/output, threads, collection classes, and networking. Students will develop and test Java applications using Eclipse. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and on-hand experience on the development of web and mobile applications with Java.

In this class, students will learn basic skills and concepts of computer programming in an object-oriented approach using Java. They will learn the principal concepts such as classes, methods and argument passing, loops, and general problem solving ability that will become building blocks to their programming skills. The key topics include

- Java primitive and non-primitive data types
- Control flow constructs
- Built-in class libraries
- Java applets
- Object-oriented programming concepts such as classes, objects, method overloading and encapsulation

**Prerequisites:** Computer organization, or consent of instructor.

**Textbook:** Paul Deitel and Harvey Deitel, `` Java How To Program," Morgan Kaufmann, 9th ed., 2011.

**References:**

- Frances P. Trees and Cay Horstmann, "Computing Concepts with Java Essentials," 3rd ed., John Wiley & Sons, Inc, 2004.
- Ken Arnold, James Gosling, David Holmes, "The Java Programming Language," 4<sup>th</sup> ed., Addison Wesley, 2005.

<b>Grading policy:</b>	Midterm Exam	25%
	Final Exam	30%
	Homework (6 or 7times)	25%
	Project	15%
	Attendance	5%
-----		
	Total	100%

**Schedule:**

<b>Week</b>	<b>Subject</b>	<b>Remark</b>
1	Introduction to Java	HW 1 assignment
2	Language Components	Project assignment
3	Object-Oriented Programming	HW 2 assignment
4	Methods	HW 3 assignment
5	Arrays	
6	Encapsulation	HW 4 assignment
7	Inheritance & Polymorphism	
8	<b>Midterm exam</b>	Open book and note
9	Abstract Classes and Interfaces	HW 5 assignment
10	Exceptions	
11	Input and Output & GUI	HW 6 assignment
12	Threads	
13	Collections	HW 7 assignment
14	Networking	
15	Project presentation Review	
16	<b>Final exam</b>	Open book and note

**Remark:**

- 10% penalty per day for late submission of the assignments.
- Honor code violation such as copying the assignments results in **F** grade for all the students involved.
- The exams are open book and notes.
- If you miss the classes more than three times without approval, an F grade will be given regardless of the classwork.
- All the course materials are available at <http://mobile.skku.ac.kr> and I-camp