CPE102/CSC102
Introduction to Java Programming

Make sure you are in the right class :)

CPE102/CSC102
Introduction to Java Programming

Dr FU Chi Wing

Email: cwfu@ntu.edu.sg

&

Dr TAN Kheng Leong

Email: khengleong@ntu.edu.sg

Objectives

Upon completion of the course, you should be able to:

- Understand the program development process.
- Analyze elementary algorithmic problems, and implement the program design in Java.
- Run and test programs to verify the correctness of programs.
- Document the design, implementation and test of the programs.
- Use good programming practice to the development of Java programs:
  http://en.wikipedia.org/wiki/Programming_style
  http://java.sun.com/docs/codeconv/

Course Syllabus

- Computer Systems & Java Programming
- Java Program Development
- Data and Operators
- Console Input/Output
- Branching
- Looping
- Methods

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- Arrays
- Classes & Objects
- Strings & Characters
- Class Inheritance (Optional & Non-Examinable)
- Exception Handling
- File Input/Output

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Course Structure

- Lectures - 12 Weeks (special year)
  - About 32 lectures: 3 Hrs/week
- Tutorials - 11 Weeks
  - 1 Hr/week
  - Start from **week 3**
- Laboratory - 10 Lab Sessions
  - 2 Hrs/session
  - **Most** students will start from **week 3**

* Check your OWN lab./Tutorial schedule

Course Schedule

		Mon	Tue	Wed	Thu	Fri	
	week 1	30	31	1	2	3	Orientation
Sep	week 2	6	7	8	9	10	
	week 3	13	14	15	16	17	Tutorial starts
	week 4	20	21	22	23	24	
	week 5	27	28	29	30	1	
Oct	week 6	4	5	6	7	8	
	week 7	11	12	13	14	15	
		18	19	20	21	22	
	week 8	25	26	27	28	29	
Nov	week 9	1	2	3	4	5	E-learning
	week 10	8	9	10	11	12	
	week 11	15	16	17	18	19	
	week 12	22	23	24	25	26	
	week 13	29	30	1	2	3	
Dec	week 14	6	7	8	9	10	
		13	14	15	16	17	
		20	21	22	23	24	

Schedule is tight!!!!

My Course Practice

- University Students …
  - Be considerate to others: including your fellow classmates and me
- Switch Phone to quiet mode
- No talking during lecture

Course Material

- Lecture slides, tutorial questions and lab questions will be available in Edventure.
- Lecture slides: You can print them out from Edventure before lectures.
- Tutorial questions: You are expected to do all tutorial questions before tutorial sessions.
- Lab questions: You are required to document lab experiments (in log book) and submit 2 lab assignments.

You should start learning how to access **Edventure**!!

Some Useful Websites

- Information on Java
  - http://java.sun.com
- Free Tutorial
  - The Java Tutorial – A practical guide for programmers
    http://java.sun.com/docs/books/tutorial

Some Useful Websites

- Good Programming Style!!!
  - The Java Code Practice
    http://java.sun.com/docs/codeconv

This *Code Conventions for the Java Programming Language* document contains the standard conventions that we at Sun follow and recommend that others follow. It covers filenames, file organization, indentation, comments, declarations, statements, white space, naming conventions, programming practices and includes a code example.

- 80% of the lifetime cost of a piece of software goes to maintenance.
- Hardly any software is maintained for its whole life by the original author.
- Code conventions improve the readability of the software, allowing engineers to understand new code more quickly and thoroughly.

Later, you may find 80% of your programming time for debugging

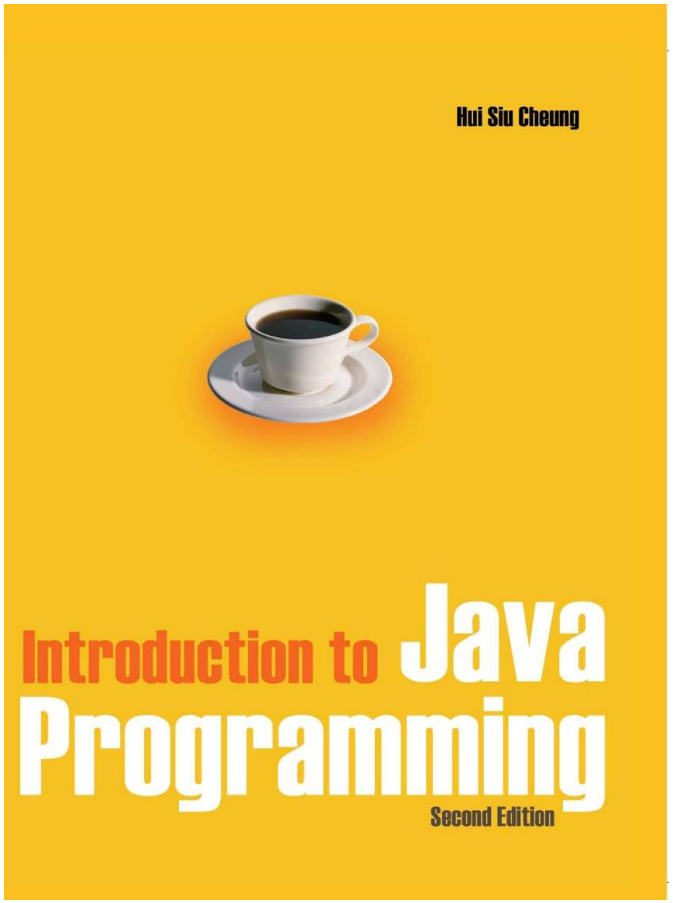
Textbook: CPE102/CSC102

Introduction to Programming

Title: Introduction to Java Programming (2nd Edition)

ISBN: 9812449574

Prepared by: Hui Siu Cheung



- Includes crucial readings for the course

References

- Lewis J. & Loftus W., java Software solutions – foundation of program design, Addison Wesley, 2005, 4th ed.
- Liang, Y.D. Introduction to Java Programming, Comprehensive Version. Prentice Hall, 2006, 6th Edition.
- Deitel, H.M., and Deitel, P. J. Java How to Program. Prentice Hall, 2005, 6th Edition.
- Savitch, W. Absolute Java. Prentice Hall, 2006, 2nd Edition.

Assessment

- Assessment
  - Examination (~50%)
  - Coursework (~50%)
- Examination
  - Answer All 4 questions
- Coursework
  - Lab. Assignment 1
  - Lab. Assignment 2
  - Lab. Experiment:
    Log book inspection and oral interview

Academic Honesty

- Unless otherwise noted, worked turned in should reflect your independent capabilities.
- **Plagiarism** (Copying of part/complete assignment) – considered as cheating. You may be expelled because of it.
- Both source and copier could be penalized.
- A certain system will be used to check your programs for plagiarism for your lab submission.

How to Study?

C – Capture

U – Understand

P – Practice

Java

oracle

How to Study?

- Lectures
  - Attend lectures -> capture + understand
  - Read lecture notes
  - Read textbook (and reference books from library)
- Tutorials:
  - Work out tutorials; don't just listen -> practice
  - Run your tutorial solutions using PC to verify your solutions
- Labs:
  - Work out all lab questions yourself -> practice
  - DO lab assignments yourself (this is an intro course)

Last words: **self-motivation and make good use of TIME!!!**