CS1280 Java to C++

Many thanks to Dr. Chionh Eng Wee for sharing the teaching material.



Instructor

Instructor: Dr. Ang Chuan Heng

Office: #03-38 COM1

Tel no.: 6516-4188

Email: angch@comp.nus.edu.sg



Compulsory Text

C++ for Java Programmers
Mark Allen Weiss
Pearson



Web References

- http://www.cppreference.com/wiki/
- Bjarne Stroustrup
- STL



Lecture Notes

- This is an online module which allows you to study the notes and work on the programming questions on your own.
- pdf of lecture notes and lab assignments can be found in <u>ivle course website</u>



Topics discussed

- Chapter 0: Introduction
- Chapter 1: Basic types
- Chapter 2: Functions, Arrays, Strings, Parameter passing
- Chapter 3: Pointers and Reference Variables
- Chapter 4: Classes
- Chapter 5: Operator Overloading
- Chapter 6: Inheritance
- Chapter 7: Templates
- Chapter 8: Abnormal Control Flow
- Chapter 10: The Standard Template Library
 - List and List iterators

Chapter 9: Input and Output



Programming Environment: unix

- Unix commands for compilation: g++
- Unix editors: emacs, pico, vi, · · · .
- Unix file names are case sensitive.
- SoC unix account for students who are new to SoC: https://mysoc.nus.edu.sg/~newacct

4

Assessments

One programming assignment for each week from Week 1 to Week 6:

$$6 \times 5\% = 30\%$$

One practical exam on Week 7 in programming lab:

$$1 \times 70\% = 70\%$$

- Gradebook will be used to release grades of your assignments except the grades of your practical exam
- This module is S/U graded

Practical exam schedule

Date: 29 SEP

Time: 2-3:45pm

Venue: PL?



- First line of each solution file must be //userid matricNumber Name
- Send an email today (once only) to cs1280@comp.nus.edu.sg
 - with the above line as the heading so that your lab submission will be accepted from then on
- A lab question will be released after each lecture. You are expected to submit your solution within the day even though the deadline is on Sunday 2400 hours
- Plagiarism will be severely dealt with



Lab Submission (2)

From the working directory where you store yourprogram.cpp, enter the UNIX command to submit it:

/home/course/cs1280/bin/submit

yourprogram.cpp

You can submit unlimited number of times before the deadline and only the latest submission will be kept. To be sure that the server has received your files, enter the UNIX command:

/home/course/cs1280/bin/check

Your submission will be marked. It will be announced in IVLE once your grade is released in the gradebook. You can view the marked files by entering the command:

/home/course/cs1280/bin/labview

Avoid Penalties

Total mark given for each lab assignment: 10 marks

- Missing id line: -1
- Improper indentation/comments -1
- Each deficiency made: -1 (at least)
- Fail to compile: -5 (at least)

Programs must be compiled by g++ in your UNIX account

- Late submission: -10
 - There is no extension of submission deadline
 - All submissions must be done through the submit command.
 Submissions to the course account cs1280 or to my personal account will not be accepted.