Week 11 : 7 DEC 2015

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for
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PROGRAMMING PRINCIPLES

CONCLUSION - REVISION SESSION

Reminders:

1 3 Pillars of OOP - Object-Oriented Programming

1. Encapsulation - each class responsible for itself
2. Inheritance - classes inherit common characteristics
3. Polymorphism - pointers to invoke super/sub class

A LOOK AHEAD TO NEXT SEMESTER

Programming 2 will be taught by Julian + Seb.

Graphical User Interface GUI

Control flow - rich set of exceptions inc. your own design, recursion and multi-tasking - especially useful for G.U.I.

Storage + files in Java

Validation + Verification

C programming language

Patterns

EXAM - 3 hours, lots of time. In a University lab room, done on a PC using tools you are used to. Open book - you can take in books, notes, access the web for tutorials, Java API, help pages.

But still an exam, so no communication - no texts, email, filesharing.

No prepared solutions, no de-compilers, no personal hardware - no laptops, USB sticks, iPods etc.

Invigilators present to enforce rules and ensure PCs + software are working, but not to help with code. If genuine hardware/software issue, tell invigilator + extra time will be available.

3 Questions

Answer ALL 3.

Q1. Easiest, 20% read code and answer codes about programming terms.

Q2. Main, 50% ability to write code and solve programming problems.

Q3. Advanced 30%
Fix problems and add functionality to an existing program.

60% of students will not finish in time. But get most of the way through Q2 and you should pass.

SAVE often and submit every 15 mins or so to handin machine. Don't leave it all to the end!

There is no 'negative' marking – if you have gained marks for one section, you won't have marks taken off later.

netbeans and intellij (?) may not work
You could put an IDE on your network space.

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REVISION TOPICS

arrays + array lists
Classes
loops if statements
exceptions

debugging
inheritance
(I/O) unlikely in exam - typically not tested
interfaces
hashmaps, data structures
scope
variables

Exam about your actual ability to program

Add a note to explain what you have used when submitting. If you have used a large block of code - but don't worry for 'snippets' - lines OK.

FEEDBACK.

Online questionnaire - ECS will take note.

LAST WORDS - -

C++ "an octopus made by nailing extra legs onto a dog." - Steve Taylor, author C++

Practice!