Comp-304 : Final Review
Lecture 32

Alexandre Denault
Original notes by Hans Vangheluwe
Computer Science
McGill University
Fall 2007

11 / 23 = 47.8%

Final Itself

- To be held April 17th in Trottier, at 2:00 PM

- It has 11 Questions.

- It's out of 180 points.

- You have 180 minutes to do the exam.

- Do you see a pattern?

- 33% of the content is pre-midterm
  - However, most of the pre-midterm stuff comes back in some form or another.

Two tutorials will be held for the final

Thursday, 14h00 to 16h00

Friday, 14h00 to 16h00

both in McConnell 103

Assignments

- Assignment 1,3,4,5 are corrected and on WebCT.
- Assignment 2 should be corrected very shortly.
- Those that hand in their assignment 6 in time will have their grades (and feedback) before the exam.

Software Process

- What is the software process?
- What are the activities of the software process?
- Waterfall, V-Model, Spiral, The Rational Unified Process, Extreme Programming (XP)
- Comparing the Processes
- What is productivity?

Unit Testing

- What are bugs?
- Testing Terminology
- Designing Tests (types of tests)
- Black-box vs Glass-box testing
- Automated Testing / Regression Testing
- Unit Tests
- PyUnit

- What does it mean to be OO?
- 9 Characteristics of OO

- What is UML?
- Structural Diagrams
  - ◆ Class Diagrams
    (inheritance relation, composition, aggregation).
- Interaction Diagrams
  - ◆ Collaboration/Communication Diagrams
  - ◆ Sequence Diagrams
- Behavior Diagrams
  - ◆ Finite State Automatons
  - ◆ PetriNets
  - ◆ State Charts

Quality of Design

- Domains
  - Domains of classes
  - Reusability & Sophistication
- Encumbrance
  - What is it? and example
  - It's use, Law of Demeter
- Class cohesion
  - Mixed – instance/domain/role
- And the material covered by Professor Vangheluwe

Design Patterns

- Singleton
- Command
- Adapter
- Composite
- Observer / Template Method
- Visitor
- Factory

What to know about DP?

- Purpose?
- When to use them?
- How to use them
- Participants
- Implementation Concerns
- Understand the given examples

Fin