Fall 2010

ICS321 Data Storage & Retrieval
Mon & Wed 12-1:15 PM

Asst. Prof. Lipyeow Lim
Information & Computer Science Department
University of Hawaii at Manoa
Staff

• Instructor: Lipyeow Lim
  – Firstname is fine!
  – www2.hawaii.edu/~lipyewo/
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  – Office Hours Wed 2-4 PM or by appointment

• Undergraduate TA/Grader:
  – Vivian Cheng likwai@hawaii.edu
Please Introduce Yourself

• Name
• Year of study
• Major
• What do you hope to learn in this class?
• One “distinguishing” fact about yourself to help me learn your name
  – Eg. Hobby, place of origin, job, travels, what you did last summer ...
Poll

• How many of you have:
  – Taken Discrete Math I (ICS141) ?
  – Programmed in Java ?
  – Programmed in C ?
  – Used unix shell commands ?
  – Used a database before ?
  – Used linux ?
  – Used cloud computing platforms like Amazon EC2 ?
  – Used virtualization technology like Vmware, Xen, KVM, virtualBox ?
Communications

• Webpage:
  – www2.hawaii.edu/~lipyew/ics321/2010fall/

• Laulima
  – laulima.hawaii.edu
  – Grades of quizzes, homework, exams will be posted there
  – Discussions

• Emails
Textbook

• Required:
  – Hector Garcia-Molina, Jeff Ullman, and Jennifer Widom.

• Alternate:
  – *A First Course in Database Systems (3nd Edition).*
  – Jeff Ullman, and Jennifer Widom

• Previous:
  – Raghu Ramakrishnan and Johannes Gehrke.
Format

• Class time: Mon & Wed 12-1:15 PM
  – Lecture (Mon & Wed)
  – Group discussion & problem solving (Mon)
  – Hands-on Session (Wed) – Please bring your computer.
• Quizzes every Monday (20%) – probably online
• 2-3 Homework assignments (20%)
• One course project (20%) – group work
  – Includes a recorded 8 minute presentation & a live Q&A
  – Peer evaluation
• One mid-term exam (20%)
  – One letter size sheet of notes allowed
• One final Exam (20%)
  – One letter size sheet of notes allowed
Pre-requisites

- Understand set theory (ICS 141 Discrete Math)
- Understand propositional logic (ICS 141 Discrete Math & ICS 111 Intro to CS)
- Be able to write a program in Java (ICS 111+211)
  - Use a text editor
  - Command shell
  - Compile and run programs
- Have access to a computer (preferably a laptop)
- Have internet access
To do well in this class ... 

- Keep up with the readings
- Attend class and participate
- Review the material for the quizzes, mid-term, and final
- Do the homework assignments
- Start on the project early
- Take charge of the learning process
  - Try out the commands on the DBMS
  - Make use of the exercises in the textbook

Focus on understanding the material to the point that you can apply it in different contexts!
Why take this course?

- Database-related jobs eg. DBA

- You’ll likely deal with data management in your (future) jobs

- Database technology is behind almost all internet technology

- ...
Group Discussion

• How would you implement an internet store without using any database software?

  – List all the questions, challenges or difficulties you encounter as you discuss the high level steps.
Group Discussion Results
Homework & Next Class

• Homework to be completed BEFORE coming to class on Wed
  – Install VirtualBox on your laptop
  – Download Ubuntu 10.04 Desktop Edition image to your laptop
  – Download DB2 Express-C 9.7 to your laptop

• Next class, we will spend 30 minutes to
  – Install Ubuntu onto a virtual machine (VM) using VirtualBox
  – Install DB2 onto the VM

• See links on the course website for more info.