CSE 444
Database Management Systems
Spring 1997
University of Washington

Introduction and Welcome

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Today's Topics

- Course contents overview
- Course structure overview
- What is a database? and who cares?

Course Contents

- DB for decades has been the workhorse of corporate applications
  - unglamorous but essential
  - lots of good-paying (but dull?) jobs
- DB is once again a hot hot topic
  - objects, very large DB, new media, distributed heterogeneous computing, RAD, etc., etc.

My Goals for You

- Learn classic topics really well
  - E/R modeling, relational design, classic query languages, storage and indexing, transaction processing concepts
- Hands-on practice with small DBs on PC
- Have awareness of some current trends
- *Enough background to go forth and learn anything you need to in the real world.*

What this course is <u>not</u>

- Not "Mastering Microsoft Access 97" (or Oracle or Sybase or whatever)
- Not becoming an SQL guru
- Not building way-cool GUIs in Visual Basic or Java
- Not a course on CORBA or ODBM or SQL Server or ...

Are you in the right course?

- CSE 326 is the prerequisite
- Also very helpful
  - Operating Systems
  - Programming Languages
  - Software Engineering
  - Computer Architecture
- CSE 444 will likely be taught again Winter
- Likely an advanced DB course in Spring

Instructor's Perspective

- 1970's: database consultant for Honeywell
- 1980's: as a grad student, DB was one of my "quals" areas
- 1990's: taught a semester-length version of this course
- Admit to feeling somewhat distanced from current practice...

  Hoping your papers and projects will help correct that!

Course Structure

- Tests: midterm and final.
  - important but not huge
- Written (non-programming) homework
- Hands-on homework (using Microsoft Access 97) including some programming
- Short research paper (due mid-quarter)
- Group DB project (due end of quarter)

Infrastructure

- TA: Jake Cockrell
- Lecture periods
  - slides will only outline the material
  - sometimes follow text, sometimes not
  - I'll want you to participate, too.
- Text: Elmasri and Navathe *2nd edition*
  - Start reading today! Chapters 1-3
  - Later you might want to buy books on MS Access and/or SQL

Hands-on Stuff

- Lab: Sieg 232 (NT)
  - Pay a visit today! Verify you can log-on and start up MS Access
- Web site

  www.cs.washington.edu/education/courses/444/
- E-mail
- *We can do a lot by e-mail and web, but I still would like to see you in person!*

Looking forward to the paper...

- Topic
  - Proposed by you, OK'd by me. Start looking!
  - Every person should have a different topic
  - Should be something current and not otherwise covered in the course
  - Could be a commercial product or application
  - Could relate to other CS areas
    - OS, Architecture, Networking, ProgLangs, etc.
- *Writing counts!*

Looking forward to the projects...

- Group projects
  - Each group with a different project
  - Get to know each other so you can form good groups!
- "Service" oriented
  - Should fulfill a real need for someone outside the course
- Emphasis on DB
  - But also specification, user interface, etc.

A Note of Caution

- The paper and projects will OVERLAP other activities: tests, homeworks, etc.
- You may expect conflicts and deadline clashes within the course!

Please use all your best time-management skills to avoid overload and stress!