Databases - Unit Details

W Liu
Assessment

- 24 lectures - Mon 11am (Fox LT), Wed 11am (Fox LT). Wed Week 6 - Prosh (no lecture). Wed Week 8 - Anzac Day (no lecture).

- 5 tutorials starting in Week 3. Written work collected and partially marked (a randomly chosen question) - (worth 10%).

- A mid-semester test during Monday’s lecture in Week 7 (worth 15%).

- Labs starting in Weeks 3 followed by a project due in Week 12 (worth 20%). Formally, labs will be supervised for one hour only, however experience shows this is rarely the case. For labs early in the semester and during project time, greater laboratory supervision is provided.

- Final examination worth 55%.
Recommended reading

- Database Management Systems
- Third Edition
- Ramakrishnan & Gehrke
- McGraw-Hill Higher Education
- ISBN 0072465638
Coverage of R & G

This unit will have an *applications and implementation emphasis*, so we will cover

- Foundations (Chapters 1-5)
- Applications (Chapters 6)
- Fundamentals of Systems (Chapters 8, 12 and 16)
- Further Applications (Chapter 19)
- A selection of advanced topics (e.g., Chapter 23)
Implementation

R & G covers the foundations and theory of database management systems, and this will be primarily covered by the lectures and tutorials.

The lab sessions will complement this theory with a strong emphasis on practical skills, in particular in writing actual SQL code and developing standalone database backed applications.

This will extend the material in Chapter 6.
Technology

- MySQL 5.5
  There are *many* variants of SQL but MySQL is open-source, free and available on major platforms, and Oracle is free for educational use.

- Linux or Windows or Mac OS X
  Unit will (try to) be platform-independent so you may choose your favourite or (recommended) experiment with two or even three different ones.

- Java 1.5/1.6 or Python
  Develop database applications as Java (possibly Python) clients.

- IDE
  You are free to use any IDE you are comfortable with.