



THE UNIVERSITY OF
MELBOURNE

Introduction to INFO90002

Database Systems & Information Modelling
INFO90002

Week 1 – Overview of the subject
Dr Tanya Linden

Database Systems





WELCOME

Coordinator/Lecturer:

Dr Tanya Linden

Best way to get in touch:

- Email lindent@unimelb.edu.au



INFO90002 Announcements

Tutorials start this week (week 1)!

- Learn how to install MySQL Workbench and Server
 - You don't need / not allowed to install anything in labs
 - ❖ Labs run Windows OS
 - Bring your laptop to a lab to get guidance for installation

Monday 14 March – Labour day – NOT a public holiday, all classes as normal

Zoom links are available from the LMS

Why this subject matters

- database = key building block in many technology careers
- database = one of the most widely-used technologies
 - embedded within most of the interesting ICT of today
 - social media, apps, websites, banking, scientific research ...
- database have come to influence our culture
 - “The database is the major cultural form of the 21st century in much the same way as the novel was for the 19th and the film for the 20th. ... While retaining the visual and temporal aspects of film, the modality of hypertext or of computer games eschews its linear modality for the modality of the database, in which objects are linked together but their assembly into a narrative experience is in the hands of the audience.”

Dourish and Mazmanian (2011), discussing Manovich (2002) *The Language of New Media*



About the subject

Prerequisites, not-allowed subjects, credit for experience

- Have you studied DB already? Don't study it again - get credit!
- Learn something NEW and EXCITING

Semester schedule: the big picture

- Modelling
- SQL
- Normalisation
- Advanced Database Concepts & Ideas



Teaching staff

Subject coordinator/Lecturer

- Tanya Linden

Tutors

- Laurens Skelly
- Fangziyun Tong
- Juliet Simon
- Nathan van der Heiden
- Fatma Mohammed

Student representative (no extra credit for this task but you can put it on your CV)

- One Volunteer (maybe 2)
 - Must be able to speak truth to power!
 - Must watch all lectures and attend all tutorials

Interacting with staff

- Canvas Ed Discussion (**All general questions are answered here**)
- **Check consultation times on Canvas**
- email for *personal* questions only from your **student email account**
- (e.g. AEA, personal issues, formal extension requests)
- include **SUBJECT CODE** (INFO90002) and **STUDENT ID** (987654) otherwise your email will not be acknowledged (**No student ID – No answer from me**)

Resources

Textbook

- Raghu Ramakrishnan, Johannes Gehrke. “Database Management Systems” 3rd edition. McGraw-Hill Education.

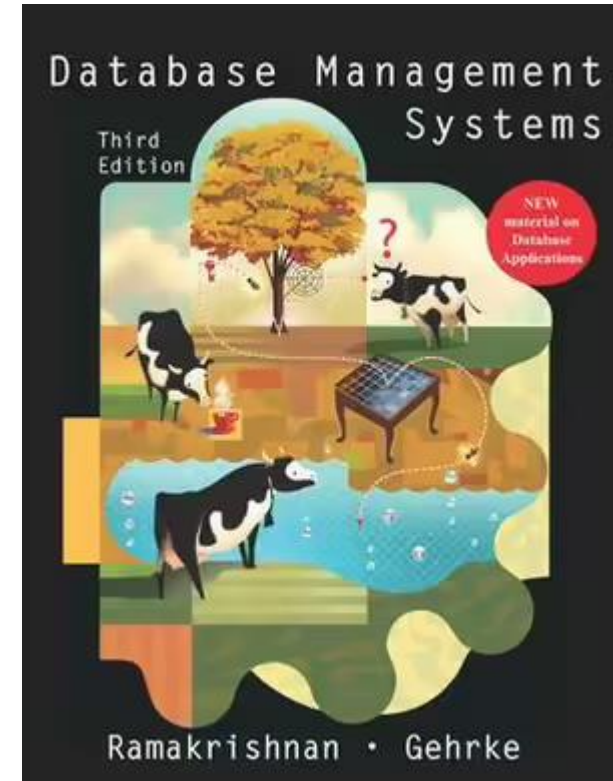
All subject materials will be on Canvas

Software

- MySQL as server and client

How to succeed in this subject

- Practice! (especially Data Modelling and SQL skills)
- Use all the learning resources provided (including attending classes)
- Discussion Forum (ask and answer questions)





Assessment



Assessment

- Assignment 1: data modelling (20%) - group assignment
 - Due in Week 6, **hurdle component**
- assignment 2: SQL (10%) - individual assignment
 - Due end of Week 9, **hurdle component**
- 2 Individual timed Quizzes in weeks 6 and 12, each worth 10% (total - 20%)
 - Week 6 Lecture Time, second hour
 - Week 12 Lecture Time, second hour
- End of semester exam (50%, 2 hours)
 - June, **hurdle**

hurdle component

A penalty of 10% per day applies to all late submissions. Submissions that are 5 days late get 0.

Special Consideration

If you believe you are entitled for special consideration:

To get special consideration for assignments or tests, email your subject coordinator **before the due date**.

Send your evidence, e.g. medical certificate (one day medical certificates are not considered).

Work commitments, *other assessments* are NOT grounds for special consideration

Disability issues: please contact STOP 1





Do not guess or assume or hope for a miracle...

Murphy's Laws directly applicable (from my experience of teaching):

- **Nothing is as easy as it looks**
- **Everything takes longer than you think**

If you have a question, ask a staff member

Check Canvas for deadlines (not staff, or classmates)

Rumours that assignment deadline has been extended are **not** a valid reason for special consideration.

Other non-valid excuses:

- My hard drive/laptop is broken
- My computer got a virus and I cannot recover the files
- The Internet at home stopped working...



**It is your
responsibility to
keep back-up
copies**

Very important: save your drafts of assignments to Google drive or OneDrive



Plagiarism

It is the University policy that cheating by students in any form is not permitted.

Work submitted for assessment purposes must be the independent work of the student concerned (for group work - the team of students concerned).

Plagiarism

- copying of another's work without proper acknowledgment is not permitted
- Or **allowing another person to copy your work**

Do NOT share your assignment files with other students!

Do not become a victim of student study site scams

- You are blackmailed
- Universities can and do revoke degrees up to 5 years post graduation
- Staff can use Google too!

See Uni of Melbourne academic integrity policy

<https://academicintegrity.unimelb.edu.au/>





How to succeed: AQF Master-level Expectations

You should, on average, invest 10 hours per week of work on this subject (this is standard for a Masters-level subject), e.g.:

- 3 hours in class/tutorial
- 2-3 hours reading/practicing
- 4-5 hours assessment tasks

Full time Study and Full time Job

- You can do full time work well
- You can do full time study well
- You can not do full time study and full time work well
 - Please reconsider your study and work commitments now. I've yet to meet anyone who has done well at both



A Message for Students with Industry Experience

You may know SQL

You may know Modelling

Industry students generally do poorly because:

- Don't follow the instructions
- Don't do well in normalisation and advanced theory topics

Industry experienced students do very well

- SQL
- Crows Foot Modelling

We can only assess what we teach in INFO90002, **NOT** what you learned in Industry



Australian Qualification Framework – Masters Level (Level 9)

Graduates at Masters level will have:

- Specialised knowledge and skills for research, and/or professional practice and/or further learning
- Advanced and integrated understanding of a complex body of knowledge
- Expert, specialised cognitive and technical skills in a body of knowledge or practice
- Ability to **apply knowledge and skills** to *demonstrate autonomy*, expert judgement, adaptability and responsibility as a practitioner or learner

See the Australian Qualifications Framework:

<https://www.aqf.edu.au/aqf-qualifications>



Our job. Your job.

We can't (and won't) tell you what to do

We will give you the necessary knowledge and skills practice to be able to do it

We will tell you if you're going the wrong way (if you ask)

You will need to synthesize and critical apply the knowledge

You must demonstrate comprehension, application, synthesis and critical thinking

Memory and Recall is Junior School (AQF 1-6)

Application is Undergraduate level (AQF 8)

You are studying at Level 9 of the (AQF9)



Using database software

We will use *MySQL* as server and client in this subject

You can use either:

- the University's database server
 - accessible from labs, or from home via VPN*
 - Your assignment 2 solution must be able to run on this server!
- or, your own computer
 - do lab exercises and assignments at home

Server address: info90002db.eng.unimelb.edu.au : port 3306

- your username and password will be given out during the lab
- not available outside the university without a VPN

If you want to use your own computer ...

- download MySQL from <http://dev.mysql.com/downloads/mysql/>
- get both Server and Workbench



Study Support

Academic English Tutorials (AET) program

This 9-week tutorial series involves **no additional assessments** and can help you further develop your academic and English language skills within the context of your discipline.

Topics covered

- Academic writing and referencing
- Critical reading and note taking
- Oral presentations
- Participating in tutorials
- Australian academic culture and expectations
- Managing time

Applications are now open. Successful applicants will be contacted in Week 1 to confirm their place on the program.

For more information and to apply:

<https://students.unimelb.edu.au/academic-skills/English-language-development/academic-english-tutorials-for-graduate-coursework-students>