

COS20031

Database Design Project

Irene Moser

Semester One, 2025

How do I study this unit?

Acknowledgement of Country

We respectfully acknowledge the Wurundjeri People of the Kulin Nation, who are the Traditional Owners of the land on which Swinburne's Australian campuses are located in Melbourne's east and outer-east, and pay our respect to their Elders past, present and emerging.

We are honoured to recognise our connection to Wurundjeri Country, history, culture, and spirituality through these locations, and strive to ensure that we operate in a manner that respects and honours the Elders and Ancestors of these lands.

We also respectfully acknowledge Swinburne's Aboriginal and Torres Strait Islander staff, students, alumni, partners and visitors.

We also acknowledge and respect the Traditional Owners of lands across Australia, their Elders, Ancestors, cultures, and heritage, and recognise the continuing sovereignties of all Aboriginal and Torres Strait Islander Nations.



Content



COS20031 content

Weekly topics

Week	Topics
1	Team building, team agreement
2	Project planning, task management
3	Database design and diagrams
4	Requirements gathering, modelling
5	Database normalisation
6	Physical model and DBMS
	Break
7	Data loading
8	Queries and Transactions
9	Query Performance
10	Major-specific work
11	Major-specific work
12	Team reflection

COS20031 tools

Software we use

Confluence

- A web portal where you can collect all your project documents. When it is time to submit a group assessment, you can export this as pdf and upload to Canvas

diagram.net (formerly draw.io)

- A web portal where you can draw database diagrams with the appropriate symbols

MySQL

- A database 'engine' that holds your physical database
- You can use the one on Mercury or a local installation

phpMyAdmin or SQL Workbench

- You choose whether you use a web interface or install a client

Other

- Video tool, Software for making slides, editing documents, talking to your team, possibly others of your choosing.



Project brief

Archery Scoring Database

Project brief

- Under 'Modules' on Canvas (toward the end)

Presentation

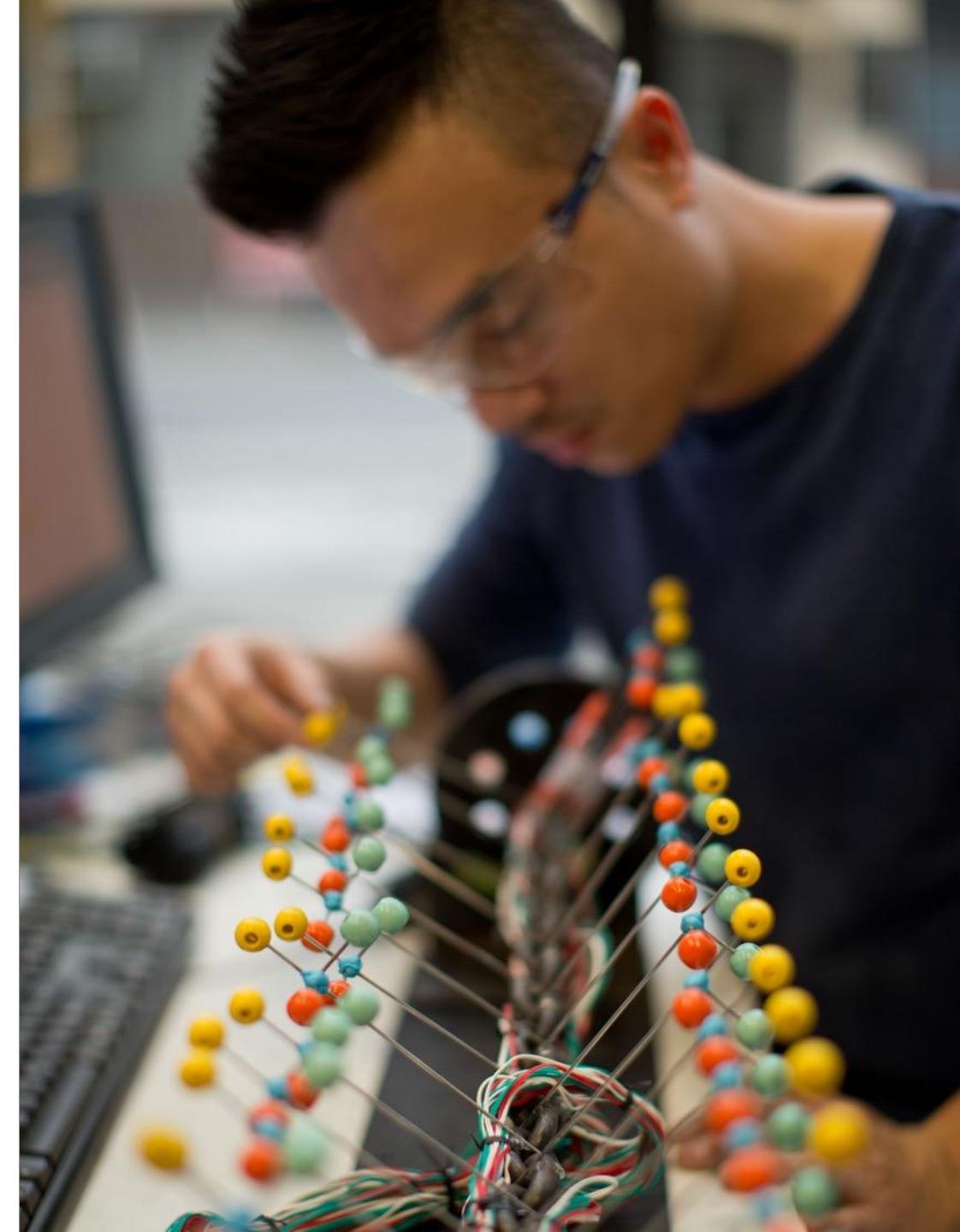
- Week 2 Live Online
- Discussed in week 2 workshop

Project client

- For questions, the convenor will act as client



Structure



COS20031 structure

Weekly activities

1. Independent study
2. Live Online session
3. Tutorial (Class)
4. Workshop

Independent Study

This starts the week.

Content

Mostly short videos on the week's topic

- Listed on Canvas
- They are the 'short story'
- If you don't understand, please research further

If you are still not quite clear

- Ask questions in the live online session
- Ask questions in the tutorial



Live Online

1-hour session on Collaborate Ultra

Content

Clarification on the week's topic

- Questions about the topics
- Information about the project brief
- Questions about the content and structure of the unit



Tutorial(First hour of 'Tutorial')

1-hour practical about the topic

Content

Small challenges about the week's topics

- Some are individual assessments
- They prepare you for the work on your project
- The tutor can help if questions arise while you are doing the exercises

Tutorial and Workshop are combined in the timetable as 'Tutorial'

- This is the only way to make sure they happen consecutively
- You can decide whether to come to campus or work from home (discuss with your fellow students and the tutor)



Workshop (Second hour of 'Tutorial')

1-hour workshop for 4 – 5 groups

Content

Discussion of project-related work

- Facilitator meeting, discussion of team progress and challenges
- Team can continue work, assign tasks, have team meeting
- Starting/continuing activities that the team has to complete for the week
- Predominantly on campus, but can be held online if all students agree



Labour Day

Monday 10th replacement sessions

Live Online

- I will make a recording and upload

Tutorial and Workshop

- Monday sessions (6) will be held on line
- Agree on a time with your tutor



Assessments



Group Assessments

These are worth 60%.

Project Proposal 20% - due week 4

- Team Agreement, Project Plan, Objectives, Roles, Risks
- The documentation needed to kick off the project

Progress Report 5% - due week 7

- Evidence of task and time management

Final Report and Product Deliverable 25% - due week 12

- Includes the project solutions created and the process documents

Process and Product Video 10% - due week 12

- All team members present on their achievements



Individual Assessments

These are worth 40%.

Requirements Definition 10% - due week 5

- You develop requirements in the tutorial of week 4

Normalisation 10% - due week 6

- Exercise is topic of week 5 tutorial

Use Cases 5% - due week 9

- You develop the use cases in the tutorial of week 8

Database Performance 10% - due week 10

- You work with indexes in the tutorial of week 9

Reflection and Peer Assessment 10% - due week 12

- What you think about your performance and that of your team members



Teamwork



Team Formation

Due in week 1

How do I find my team members

- Teams should be formed within the tutorial/workshop stream
- Allocation with the help of the tutor
- If difficulties arise, raise them and changes can be made

Don't miss the workshop this week

- This is where teams are formed
- This week, you will also decide what format the workshop will take in the future
- If you do miss it, please find your tutor on the homepage on Canvas

Teaching Team

Convenor and Lecturer | Irene Moser | imoser@swin.edu.au | by appointment

Facilitators/Tutors

Wendy Ha | wendyha@swin.edu.au | Class 6

Afzaal Hassan | afzaalhassan@swin.edu.au | Classes 1, 3, 7, 9, 13, 15, 20, 22, 23, 25, 26

Ahmed Hussnain Shahid | ashahid@swin.edu.au | Classes 14, 16, 27

Jenny Lai | jlai@swin.edu.au | Classes 8, 10, 18, 21

Areeba Kazim | akazim@swin.edu.au | Classes 11, 24

Kalpana Nanayakkara | pnanayakkara@swin.edu.au | Classes 2, 4, 12, 17, 19

Team Member Performance Issues

Things don't always go smoothly.

Team members may have different ideas of what is considered a good contribution

- Open conversations may help
- If you cannot solve it in the team, contact the facilitator
- If the differences in expectations are minor, they can be compensated by different shares of the marks for the group work

If contributions are significantly late or of substandard quality

- Start by raising the issue with the person and the facilitator
- If the situation does not improve, agree on a performance improvement plan

See document "Marking Adjustments Due To Low Contribution"

- People who contribute less, receive fewer marks
- Explains the performance improvement plan
- If you are involved in someone else's performance management, document it and mention it in your individual reflection for bonus marks.



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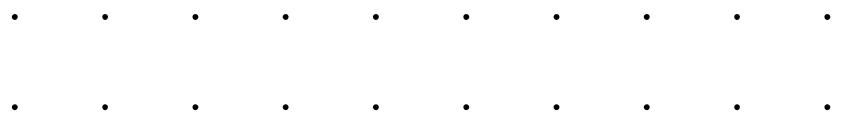
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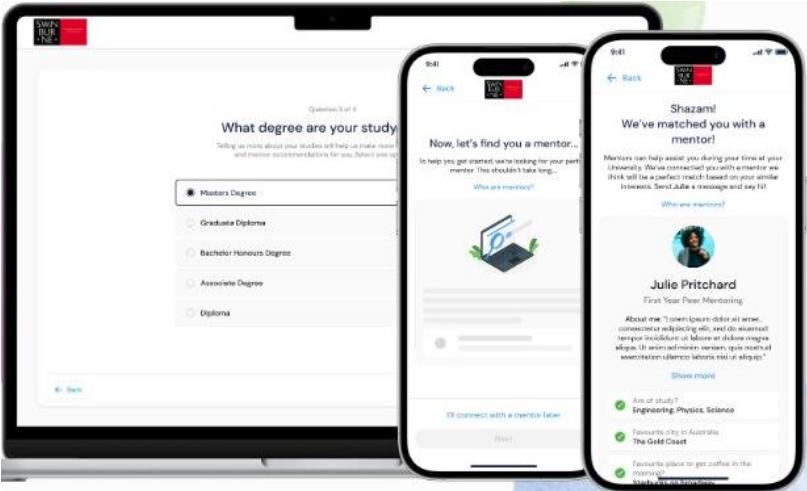
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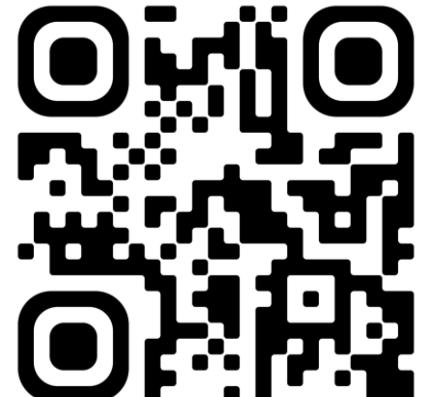


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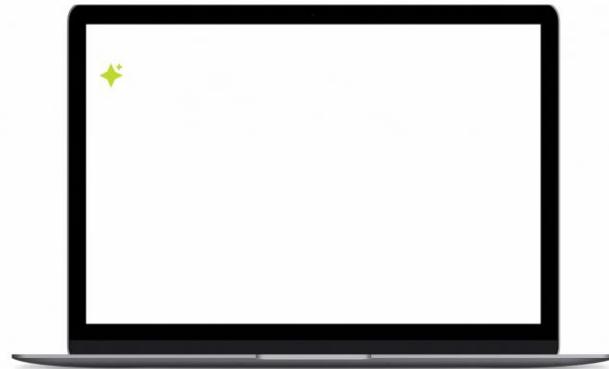
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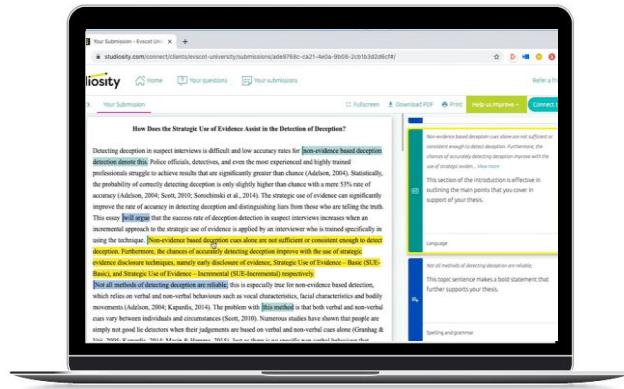


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