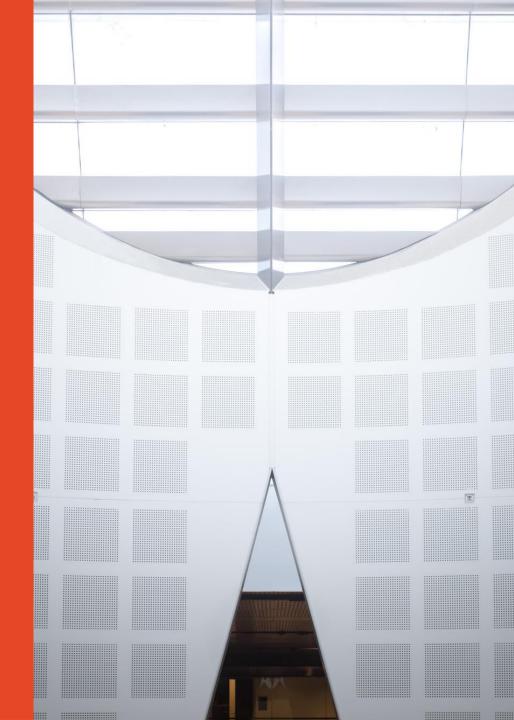
COMP5347 Web
Application Development
Unit Review and Reflection
Exam Preparation

Dr. Basem Suleiman School of Computer Science



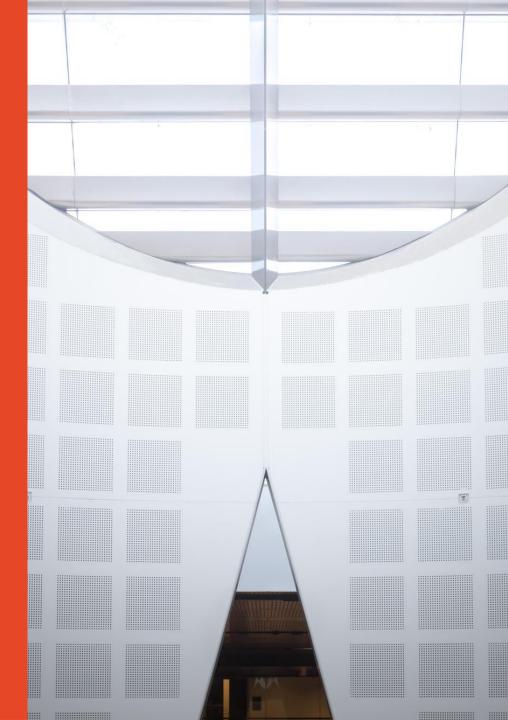


Agenda

- Lecture topics and tutorials
- Assignments Overview and Reflection
- UoS Feedback and USS
- Exam Information and preparation
- Exam Structure
- Exam Technique and Advice

Topics – Reflection

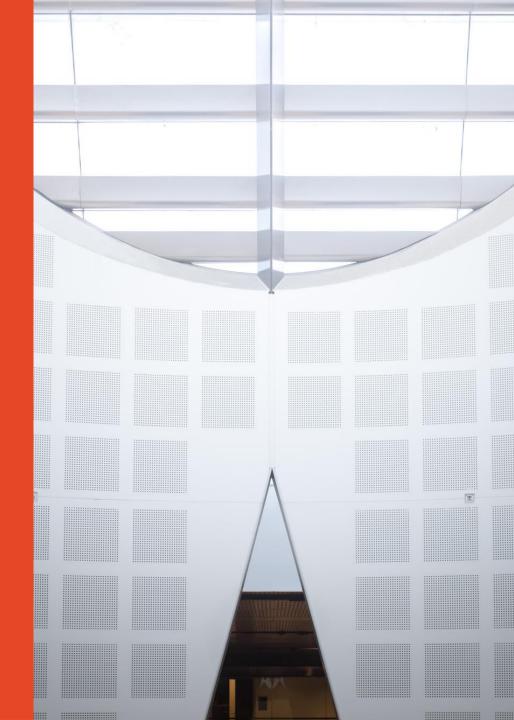




Lecture Topics and Tutorials

WK	Topic
Week 01	Unit Introduction, How the web works, JavaScript (introduction)
Week 02	Introduction to HTML and CSS
Week 03	JavaScript: client side scripting
Week 04	Browser and rendering process
Week 05	Server-side development with node.js and express.js
Week 06	Sessions and routes, MVC and MongoDB
Week 07	Connecting to database (Mongoose), MVC
Week 08	Client-side frameworks (¡Query and AJAX)
Week 09	Client-side frameworks (React, Vue), Guest Lecture
Week 10	Web services (SOAP, REST)
Week 11	Web application security
Week 12	Advanced Web Services, Industry speakers + Group project Demos
Week 13	Review, exam structure + Quiz 2

Assessments – Reflection





COMP5347: Assessment

- Assignments (45%)
 - Assignment 1: client-side development project (10%)
 - Individual, front-end, demo
 - Quiz/Demo. 1 (5%)
 - Individual, front-end, oral quiz
 - Full-stack Web application development (25%)
 - Group work, MVC, demo
 - Quiz/Demo. 2 (5%)
 - Individual, full-stack web app., oral quiz
 - Always check assignments' updates on Canvas/Ed regarding
 - Check your marks on eLearning/Canvas
 - Report any error to the coordinator within 10 days you receive your mark

Assignment 1

- Online bookstore (static web site front-end development)
 - Well done!
- Good discussions of requirements and how to address technical challenges
- Assignment demonstration
 - Presentation skills and ability to explain your own work
 - eBay guest lecture weekly presentations of team members
 - Pay attention to the assignment requirements and seek clarifications
 - Requirements clarifications from the client
 - Prepare for demos and test
 - Demo / rehearse
 - Test scenarios with different cases

COMP5347: Quiz/Demo. 1

- Oral quiz of your front-end development work
 - Explain own work in technical terms
 - Discuss why and how
 - Communicate own work to others
- Useful for oral interviews and communication with team
 - Atlassian's industry speaker: explain and communicate own code/work

Good practice

Quiz Overview and Feedback

- Review relevant materials: lectures, tutorials, own work
 - Practice and try tutorial/assessment exercises (not copy-paste)
- Review own code, and the assignment requirements
- Understand questions, think and reflect
- Answer succinctly and clearly
 - Specifically to the points/context
 - Quality not quantity
 - Use appropriate technical terms
 - Answer specifically within the provided context (code/scenario)

Group Project Assignment

- Full-stack Web application
 - E-commerce, MEAN stack
- Correct implementation of all requirements
 - Sign-up, login, home page, search, add product, add to cart, etc
 - MVC
 - Should be able to explain your design decisions
 - Other user experience
- Teamwork
 - Github collaborative web development
 - Contributions and understanding of work done
 - Team demo
 - Team dynamics

Team Dynamics

- Teams must organize itself
 - Arrange internal communication and meetings
 - Set internal deadlines
 - Follow up if deadlines are missed
 - Have fallback mechanism
 - Have dispute resolution mechanism
- Should have reported problems (unresolvable disagreements, member who doesn't contribute, etc.)
- Group and Individual demos to evaluate contributions

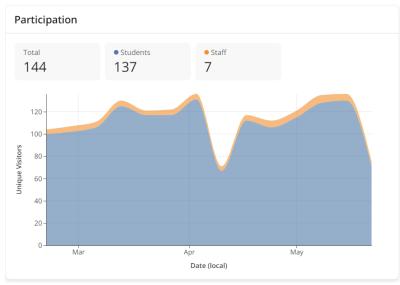
COMP5347: Quiz 2

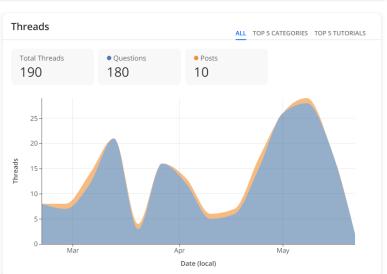
- Oral quiz of your group project (development work)
 - Explain own and group work in technical terms
 - Discuss why and how
 - Communicate own and group work to others
- Useful for oral interviews and communication with team
 - Atlassian's industry speaker: explain and communicate own code/work
 - Good practice

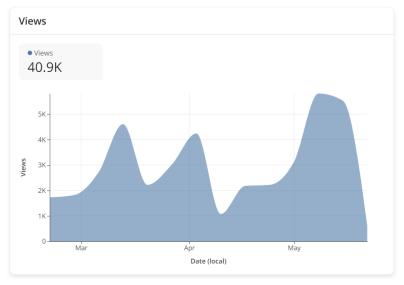
Quiz Overview and Feedback

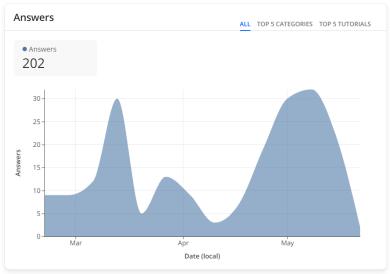
- Review relevant materials: lectures, tutorials, own work
 - Practice and try tutorial/assessment exercises (not copy-paste)
- Review own code, and the assignment requirements
- Understand questions, think and reflect
- Answer succinctly and clearly
 - Specifically to the points/context
 - Quality not quantity
 - Use appropriate technical terms
 - Answer specifically within the provided context (code/scenario)

Ed Discussion – Engagement

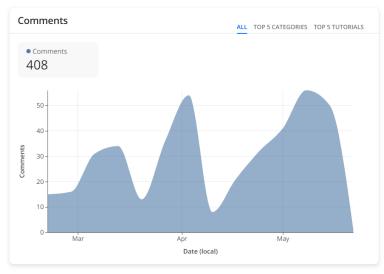


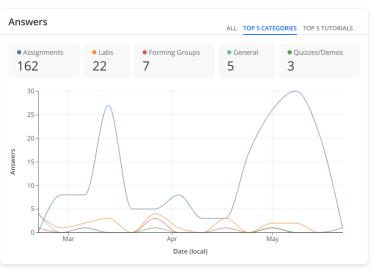


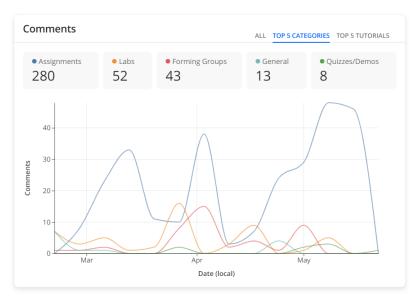




Ed - Discussion

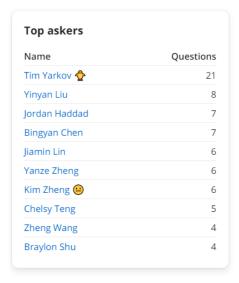






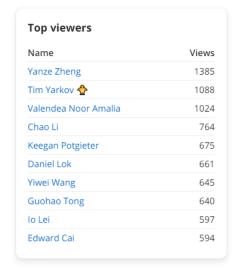


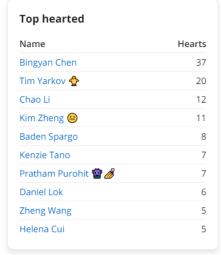
Ed Discussion – Students Engagement



Name	Answers
Chao Li	5
Tim Yarkov 💠	3
Wei Wei	2
Bingyan Chen	2
Zijie Zhao	2
Zheng Wang	1
Daniel Lok	1
Lawson Han	1
Kenzie Tano	1

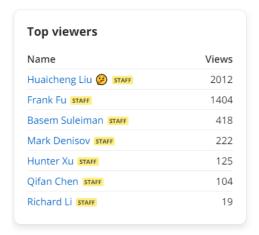
Name	Comments
Tim Yarkov 💠	22
Bingyan Chen	13
Chao Li	11
Zheng Wang	10
Yiwei Wang	10
Kim Zheng 😐	9
Yinyan Liu	9
Pratham Purohit 🎡 💋	8
Yanze Zheng	8
Zhuyun Wang	7

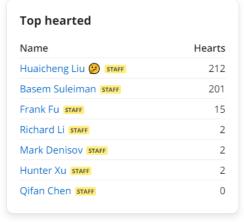


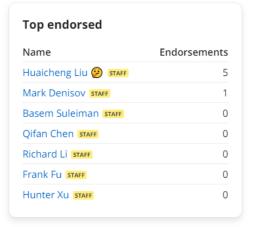


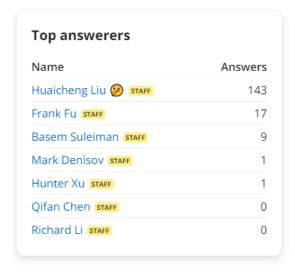
Name	Endorsements
Zheng Wang	1
Helena Cui	1
Yanze Zheng	1
Tim Yarkov 💠	1
Baden Spargo	1
Chelsea Guo	0
Sarah Liu	0
Tiger Yin	0
Becky Xu	0
Catherine Yang	0

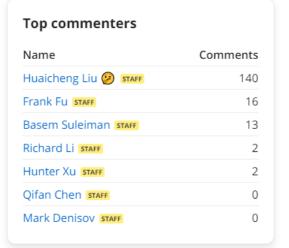
Ed Discussion - Staff Engagement











Industry/Guest Lectures – Weeks 9 &12

- Client-side Frameworks Muhit Anik Engineering Team Lead
 from Nasdaql
 - Front-end development frameworks
 - React and Vue.js
- Client-side Frameworks with React Hunter Xu PG Software
 Engineer from Usyd
 - Front-end development frameworks
 - React with examples
- Front-end Development Beyond Basics Imad Sader
 Software Engineering Manager from eBay

Industry Lecture – Week 13

- Best Practices in Web Development <u>Tulika Shrivastava</u>
 <u>Software Architect from Autodesk</u>
- Experienced in designing and building Scalable, Resilient and Highly Available Web products and service
- Topics:
 - Microservice architecture
 - Cloud development
 - Testing and development (CI/CD)
 - Monitoring and security aspects
 - Agile development

UoS Feedback and USS





Feedback From Tutors and Staff

- Good participation and preparation in most circumstances
- Tried their best to complete tutorial exercises
- Willing to learn, proactively
- Ask good questions, asked their tutor if there are doubts or issues
 - The more questions one can ask the more they can learn, and they have been doing very well on that (at least for the first half of the semester)
- manage to bridge the gap between the lab materials and group project requirements, proving their diligence
- Discussed issues with fellow students and helped one another

Feedback From Tutors and Staff

- Listen more attentively whilst tutor tried to explain certain or difficult sections of the tutorial exercises, even though they may have completed those parts
- Ask 'why' before writing a single line of code. E.g. why do I need this function?
- Always check your understanding, e.g., ask 'what validates/how do I know', even if it's something very basic like console.log("Counter index is": i);
- understanding how different concepts, frameworks, libraries in web development fit together
- Communicating ideas among students, especially in groups
- Better to learn to find and fix it bugs by yourself
- Work on your assignments early and more often
 - Try to resolve issues early and report it if resolutions fail
- Prepare for your demos and quizzes

Unit of Study Feedback 2022

- Previous semesters feedback/surveys
 - Current state of the unit reflection on past feedback
- Continuous monitoring and evaluation
 - Student inquiries and matters
 - Tutors feedback / tutorial performance
 - Assessment performance
- Improvements
 - Assessments: mark re-distribution
 - Lab hours (2 sessions)
 - Updated tutorials and review tutorials
 - Tutorial solutions (feedback and reflection on your learning)
 - Extended demo and quizzes times
 - Lecture online questions and discussion
 - Industry/guest Lectures four experts covering different topics

Unit of Study Feedback 2023

- To share what you enjoyed and found most useful in your learning, and to provide constructive feedback
- To 'pay it forward' for the students coming behind you, so that their learning experience in this class is as good, or even better, than your own.
- When you complete your USS survey, please:
 - Be relevant
 - Be specific
 - Which class tasks, assessments or other activities helped you to learn? Why were they helpful?
 - Which one(s) didn't help you to learn? Why didn't they work for you?
 - Be constructive
 - What practical changes can you suggest to class tasks, assessments or other activities, to help the next class learn better?

Unit of Study Survey 2023

- Complete the ONLINE survey at
 - https://student-surveys.sydney.edu.au



- each survey completed will give you an entry into a prize draw to win a range of prizes including:
 - Apple iPad Air
 - Apple watch
 - JB HiFi Gift Cards

Unit of Study Survey 2023

Complete the ONLINE survey at https://student-surveys.sydney.edu.au





COMP4347 <u></u>

https://student-surveys.sydney.edu.au/s/uss695883

COMP5347 –

https://student-surveys.sydney.edu.au/s/uss695916

- each survey completed will give you an entry into a prize draw to win a range of prizes including:
 - Apple iPad Air
 - Apple watch
 - JB HiFi Gift Cards

Exam Info. & Preparation





Exam information - On-Campus

- Check Exam time table for details
 - Date and venue
- Not well before the exam
 - Do not attempt the exam. Apply for special consideration ASAP.
- On-campus closed-book exam (paper-based exam)
 - CC students must do on-campus exam
 - Supervised/invigilated
 - Answer on provided exam paper
 - No materials allowed
- 2 hour writing time + 10 minutes reading time
 - Read and plan carefully. would help a lot!

Exam information – Remote (Online)

- Check exam timetable for details
 - Date (AEST Sydney time)
- Check COMP5347 Exam Canvas page
 - Report issues
- 2 hour writing time + 10 minutes reading time
 - Read and plan answers carefully!
 - 15 minutes quiz buffering time (for technical issues)
- Canvas-based online exam (closed book)
 - Answers on Canvas, no file uploads
 - Proctored exam (Live+ proctoring)
 - No materials or access to electronic files/resources allowed
 - Focus on your exam. Time is just enough!
- The instructions and policies at the Canvas exam page apply
 - Does not copy from other students or online sources
 - Be prepared, time is just enough

Exam Preparation

- All materials covered week 1 to week 11
 - Lecture slides (and supporting resources/references)
 - Lab materials / tutorials
 - Assessments
 - Quizzes and assignments
- Industry/guest lecture(s) NOT included (not examinable)
 - Front-end development beyond basics
 - Client-side frameworks (React and Vue)
 - Web Development Best Practices
- Study circles
 - Prepare with a group of classmates
 - Prepare and ask questions, answer questions, and give feedback
 - Weekly practicing; lectures, tutorials and assessments
- Exam questions on Ed board (use "Exam" category)

Online Canvas Exam - Conditions

This is a Supervised (Live+) final exam.

You MUST make a booking with ProctorU in advance in order to sit this exam. Refer to Step 2 in Exam preparation section below.

– Exam conditions:

 This is a closed book exam. You are not permitted to use third party communication or collaboration apps or websites. Access to any such app or website is strictly prohibited during your exam and is a serious academic integrity breach.

Materials permitted

You are **not** permitted to have or use any materials. A physical (i.e., not online) standard linguistic dictionary (English to foreign language and vice versa/bilingual) is allowed.

- Materials provided: None

Not Well:

Do not start this exam if you are too ill to complete. If you are ill, you should visit
a doctor as soon as possible (within 2 days) and apply for special consideration.

Online Canvas Exam – Academic Integrity

Academic Integrity

Online exams are monitored for potential academic integrity issues, and breaches will be investigated. Review the <u>Student</u> Charter and your Academic integrity responsibilities and the Integrity contract.

You are responsible for adhering to the exam conditions:

You are not permitted to use personal communication devices, which includes mobile phones, headphones, or a second monitor.

You cannot communicate or share any exam-related materials with another student or any other party during the exam. This includes third party communication or collaboration apps or websites.

Failure to comply with the examination conditions will be considered an academic integrity breach and will lead to proceedings under the <u>Academic Integrity Policy 2022</u> or where applicable, the <u>University of Sydney (Student Discipline) Rule 2016.</u> If you are found to engage in cheating, there may be serious consequences, including but not limited to failing the test (and other penalties).

Online Canvas Exam - Pre-exam to do

- 1. Read through the <u>Taking Online Exams</u> site as early as you can for advice and preparation tips.
 - You should set up your ProctorU account \Rightarrow and install the required software at least one week before your exam.
- 2. Schedule your exam as soon as possible using this link: ProctorU schedule invitation
- Install the ProctorU browser extension.
 - ProctorU browser extension for Google Chrome
 - ProctorU browser extension for Mozilla Firefox
 - 4. Take the practice exam to ensure your system is set up correctly: <u>Supervised (Live+) practice test</u>
 - If you have technical problems setting up your computer to access the practice exam ProctorU can help you via live chat.
 - MacOS X users need to take an additional setup step Mac setup instructions.
 - Microsoft Surface users must ensure that the <u>front-facing camera is selected</u> before beginning their exam.

Online Canvas Exam - Pre-exam to do

Starting this exam

- 5. One hour before your scheduled start time, make sure you complete these online exam preparation steps.
 - Please go to the bathroom before you start your exam. You are allowed to take a bathroom break during the exam, and ProctorU will re-check your exam space when you return. Excessive or multiple breaks may be reported for potential integrity issues.

6. Start your exam at your scheduled start time by clicking here: Connect to your proctor

7. This exam is password locked, your proctor will unlock it for you: COMP4347 COMP5347 Final Exam

Online Canvas Exam - Help Centre





Final Exam for: COMP4347_COMP5347

<u>UNIV STUDENTS ONLINE TEST SUPPORT SITE</u> > <u>Pages</u> > Help centre

Home

Modules

Help centre

Assignments

Online Canvas Exam - Help Resources

Having trouble starting or completing your test or exam?

Follow the instructions below for your particular scenario.





Supervised (Live+) or Monitored (Record+) test or exam

- 1. If you can't start your test or exam, first double check that you've followed each instruction correctly. To do this **go back to the Canvas test** or exam site homepage and read through each instruction again.
- 2. If you still cannot start your test or exam or encounter issues during a test or exam, check these known issues and if any apply to you, follow the instruction to fix it.
- 3. If that didn't work, contact to ProctorU support using one of the following options:
 - Start a chat with Proctor U → (this is the fastest option).
 - To speak to an agent faster, type 'agent' into the chat window to be connected to a human representative
 - If you're having trouble starting a live chat, please see this guide on how to connect to ProctorU support
 - Email them on support@proctoru.com
 - Call them on +61 1800 841 822

Online Canvas Exam - Technical Support



Trouble connecting to the VPN or accessing a University system?

If you need help with USYD systems, for instance you can't log into Canvas or the VPN isn't working:

- Phone: 02 9351 2000 (option 2 for ICT) between 8am and 9pm
- Email: ict.support@sydney.edu.au

Frequently asked questions

Click the relevant link below to get answers to common questions:

Supervised (Live+) FAQs

Monitored (Record+) FAQs

Online Canvas Exam – Technical Support

Known issues

If you encounter one of these problems, simply follow the instructions below.

Test or exam type	When does the issue occur?	Description of issue	How to fix it
Live+ Record+	l can't start my test or exam	Can't start an exam or re-start after a disconnection and a message tells you have another exam in-progress	Contact ProctorU support (see contact options above). They will fix the issue and restore any lost time
			If you have multiple windows and/or applications open ProctorU may ask you to select which of these you would like to share (similar to how Zoom asks you to specify what to share when you share your screen).
			For your exam, you will need to share the whole/entire screen . To do this click on the image of your screen (seen in the red box below).
Live+ Record+	I can't share my screen with ProctorU	The the 'Share' button is greyed out (you can't click it)	Audio proclama complications, analycially plantage Share your entire corses Notice youth to you the proclama only as your process only ask proclamation. Want Correct Correct

Exam information

- Exam is worth 55% of your total mark
 - Exam is marked out of 100
 - You need to get at least 40% in the exam to pass the subject and at least 50% overall mark

Exam Structure

Exam Technique and Advice





Exam information

- Exam is worth 55% of your total mark
 - Exam is marked out of 100
 - You need to get at least 40% in the exam to pass the subject and at least 50% overall mark

Exam Questions (1)

NO Multiple Choice Questions

Multiple question types and formats

- Most with multiple parts
- Short, medium and large answer questions
- Scenario-based questions
- Explain concept/process/method/technique
- Some coding questions (write code, answer questions about given code)
- Explain, discuss and describe questions
- Write code for a given scenario

Exam Questions (2)

- Source code extension question(s)
 - E.g., extend given source code to implement new functionality and/or extend/change the behaviour of existing one
 - Read and understand the requirements
 - Your code must compile and run successfully
 - Your code must produce correct output/intended behaviour

Exam Questions (3)

Scenario-based question(s)

- Using provided information and/or code
- Answer specific questions
- Require applying concepts and discussion (not simple description or listing info.!)
- Pay attention to the provided details and answer succinctly and use the provided info.

Exam Questions (4)

Understanding code question(s)

- Using provided information and/or code
- Answer specific questions
- Front-end and/or back-end
- Understanding and applying how source code works, execute and its logic
- Require applying concepts and discussion (not simple description or listing info.!)
- Pay attention to the provided details and answer succinctly and use the provided info.

Exam Questions (5)

- Writing source code question(s)
 - Using provided information and/or code
 - Based on certain requirements
 - Code must be correct, compile and run correctly to produce the correct output/behaviour
 - Follow specific requirements and use of provided info./code
 - Pay attention to the provided details and answer succinctly and use the provided info.

Exam Technique and

Advice





Advice for doing well in this unit

- To do well in this unit you should
 - Organize your time well
 - Devote 6-9 hours a week in total to this unit
 - Read.
 - Think.
 - Practice.

"Tell me and I forget, teach me and I may remember, involve me and I learn." – Benjamin Franklin

Exam Preparation

- Lectures provided some discussion questions (individual and group) in class
- Assignments should have helped you to practice and apply concepts, methods, techniques, principles, etc
 - Problem solving in open and very extended time
- Quizzes should have helped you to practice some kind of exam questions
- On-going study and practice:
 - Study, practice and learn
 - Be efficient and effective
 - Be succinct (quality not quantity)

Exam Preparation

- On-going preparation
 - Lectures, tutorials, assignments and practice
- Individuals
- Study circles
 - Prepare with a group of classmates
 - Prepare and ask questions, answer questions, and give feedback

Exam discussion board – Q&As

Exam Technique

- Plan how you will allocate time (wisely)
 - Use "reading time" to check your understanding
 - Also to plan time allocation to questions
 - Plan the order of answering questions (e.g. answer easier ones first)
- Answer everything (get the "easy marks")
 - Plan your answer and write answers relevant to the questions
 - Quality not quantity
- Type clearly and efficiently
 - If you are asked to list features, using bullet points is more efficient and easier to read
 - Answer as instructed (provided text space)
 - Plan your answers on "rough work" pages

Pragmatic Advice

- Check all the information on the Canvas exam page before the exam
- Prepare your PC and check your internet beforehand
- Be in quite and prepared space. Inform family/friends/mates you're doing exams
- Check your internet and network connections.
- Keep plenty of water around you, and remove all distractions
- Be relax and stay focused
 - The exam will be based on the materials covered
 - It will examine the content of the course, with emphasis similar to lectures, labs, and assignments

Illness

- If you are unwell, and it seems that you won't be able to demonstrate your knowledge/skill properly, then you can request special consideration
- Follow the same procedure as during semester (get medical person to fill out special USyd form, hand it in within one week)
 - Check university policies
- Usual outcome: an alternate test, a few weeks later
- If you become sick during the exam itself, raise hand and speak to the invigilator
- The University goal is to get a fair assessment of what you have achieved

Special Consideration (University Policy)

- If your performance on assessments is affected by illness or misadventure
- Follow proper bureaucratic procedures
 - Have professional practitioner sign special USyd form
 - Submit application for special consideration online, upload scans
 - Note you have only a quite short deadline for applying
 - http://sydney.edu.au/current_students/special_consideration/
- Also, notify coordinator by email as soon as anything begins to go wrong
- There is a similar process if you need special arrangements eg for religious observance, military service, representative sports

Academic dishonesty and plagiarism

- The University takes cheating and plagiarism very seriously
- The process uses centralized Uni system and database
- Please read the Uni policy on Academic Honesty carefully:
 - http://sydney.edu.au/elearning/student/El/academic_honesty.shtml
- Two common forms of academic dishonesty (there are others):
 - If you submit someone else's work (or part of it) as your own, you are guilty of plagiarism
 - If you make your work available to somebody else to copy, you are guilty of academic dishonesty
- Penalties
 - permanent record in the Uni database and
 - mark deduction, e.g. 0 for the assignment, fail for the course, expulsion from the University

All cases are investigated!

Student excuses

- All these are cases of plagiarism and academic dishonesty we have seen in our school and the student excuses are not acceptable:
 - I sat the test and then posted the questions and solutions to my friends whose test was later in the week. I only wanted to help them understand the concepts that are examinable.
 - I posted parts of my code on my web page (group discussion forum) because my solution was cool (or I wanted to help them). I didn't expect them to copy it.
 - I tried to do the assignment on my own but I had problems with the extension part that I couldn't fix, so I submitted my core part and his extension part. I didn't cheat.
 - I finished my assignment but my friend had family problems. I felt sorry for her, so I gave her my assignment as an example. She said she only wanted to have a look and promised not to copy it.
 - The test has finished but the tutor hasn't collected the papers yet. I showed my answer to my friend. I didn't expect him to copy it.
 - He is my best friend. I had no choice but to let him copy my assignment.

Key message

- Plagiarism and any form of academic dishonesty will be dealt with, and the penalties are severe
- We use plagiarism detection systems such as MOSS and TurnItIn that are extremely good. If you cheat, the chances you will be caught are very high.
- If someone asks you to see or copy your assignment, or to complete the assignment instead of them, just say: I can't do this. This is against the University policy. I will not risk my future by doing this.

Be smart and don't risk your future by engaging in plagiarism and academic dishonesty!

Reminder

- To pass this unit you must do all of these:
 - Get a total mark of at least 50%
 - Get at least 40% for your exam mark

Other support

- Learning support
 - http://sydney.edu.au/study/academic-support/learning-support.html
- International students
 - http://sydney.edu.au/study/academic-support/support-for-international-students.html
- Aboriginal and Torres Strait Islanders
 - http://sydney.edu.au/study/academic-support/aboriginal-and-torres-strait-islandersupport.html
- Student organization (can represent you in academic appeals etc)
 - http://srcusyd.net.au/ or http://www.supra.net.au/
- Please make contact, and get help
- You are not required to tell anyone else about this
- If you are willing to inform the unit coordinator, they may be able to work with other support to reduce the impact on this unit
 - eg provide advice on which tasks are most significant

THANK YOU!

All the Best in your Future Study and Career!



