Web Application Development

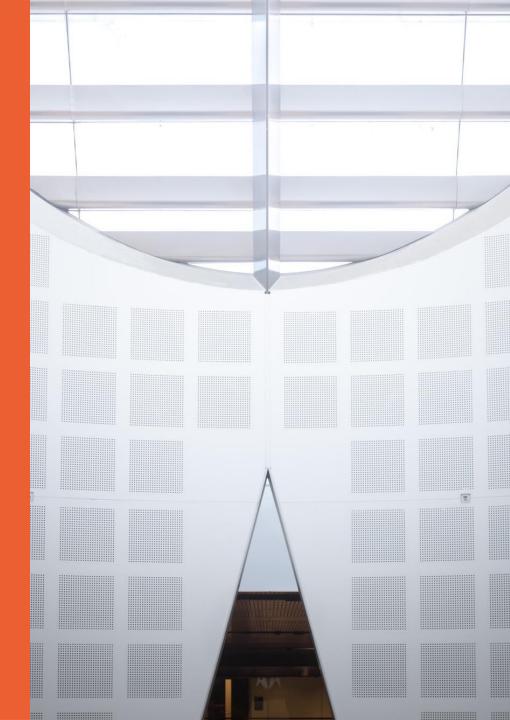
COMP4347 COMP5347

Unit Review and Reflection Exam Preparation

Week 13 Semester 1, 2025

Dr. Mehdi Nobakht School of Computer Science



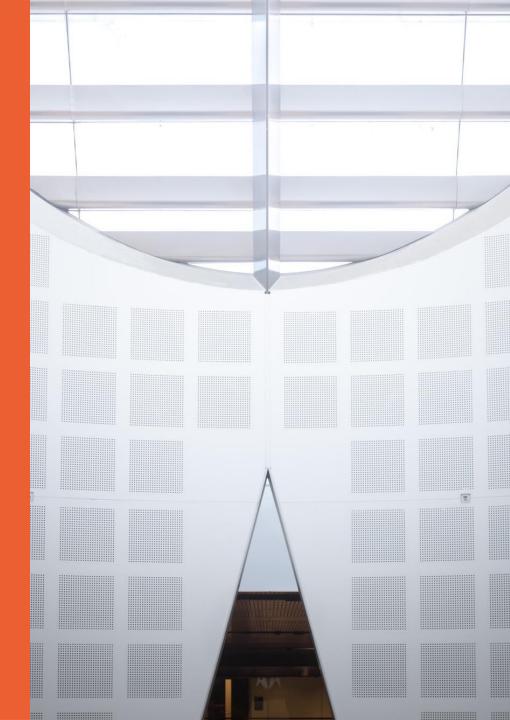


Agenda

- Unit Review and Reflection
- UoS Feedback and USS
- Exam Information and preparation
- Exam Structure
- Exam Technique and Advice

Topics – Reflection

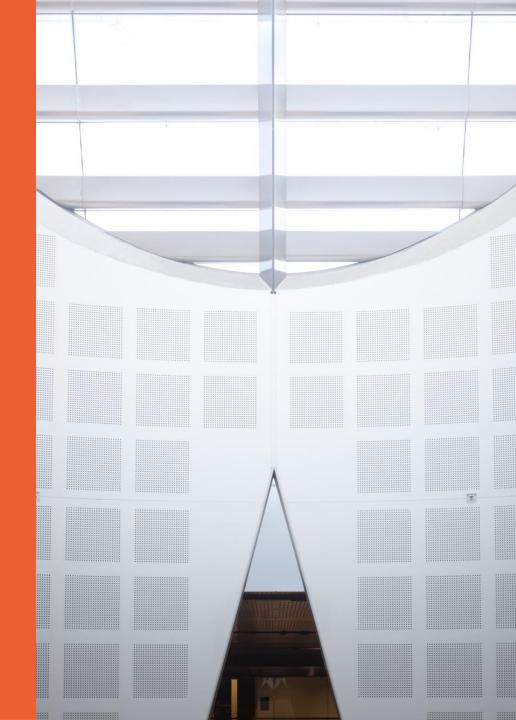




Lecture Topics and Tutorials

WK	Topic
Week 01	Unit Introduction, How the web works, JavaScript (introduction)
Week 02	Introduction to HTML and CSS
Week 03	Advanced HTML and JavaScript
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 (jQuery and AJAX)
Week 09	Front-end Development Frameworks (React), Guest Speaker
Week 10	Web Services (SOAP, REST)
Week 11	Web Security
Week 12	Industry Speakers
Week 13	Unit Review and Exam Structure

Assessments - Reflection





COMP5347/4347: Assessment

- Assignments (45%)
 - 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, group demo
 - Quiz/Demo. 2 (5%)
 - Individual, full-stack web app., oral quiz
 - Always check assignments pages on Canvas/Ed discussion
 - Check your marks on Canvas
 - Report any errors to the lecturer within 10 days you receive your mark

Assignments

- Assignment 1
 - static web site front-end development
 - Well done!
- Assignment 2
 - Full-stack Web application
 - e-commerce, MEAN stack
 - MVC -- be able to explain your design decisions
- Good discussions of requirements and how to address technical challenges
- Teamwork

Quiz/Demo.

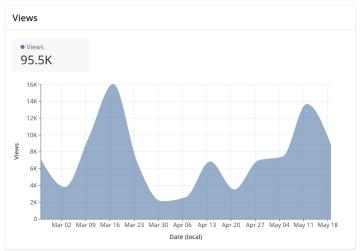
- Oral quiz of your development work
 - Explain group/own work in technical terms
 - Discuss why and how
 - Communicate own work to others
- Useful for oral interviews and communication with team
 - Industry experience: explain and communicate own code/work
 - Good practice
- Answer succinctly and clearly
 - Specifically, to the points/context
 - Not only quantity but also Quality
 - Use appropriate technical terms
 - Answer specifically within the provided context (code/scenario)

Group Project

- Teamwork
 - Github collaborative web development
 - Contributions and understanding of work done
 - Team demo
 - Team dynamic
- Teams must organize itself
 - Arrange internal communication and meetings
 - Set internal deadlines
 - Follow up if deadline 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

Ed Discussion - Engagement

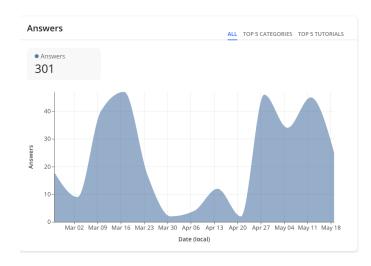


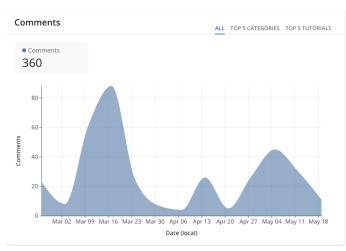


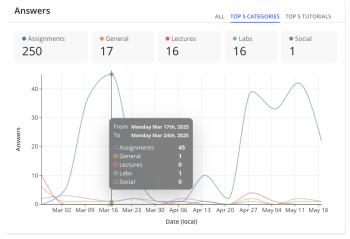


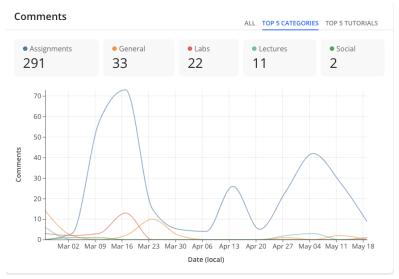


Ed Discussion - Engagement









Ed Discussion – Students Engagement



Name	Answers
William Liu	12
Erik Hai	8
Eddie Kranz	6
Thi Han Hein	5
Kyle Graham	3
Allen Burias	3
Altamash Zafar Sayed Sayed	3
Rahul Dange	2
Chris Wei	2

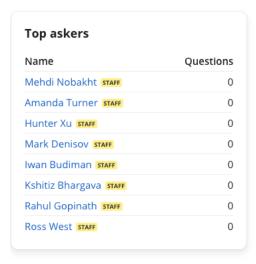
Name	Comments
Erik Hai	17
Jing Weng	11
Damon Lai	9
Xiaoteng Ma	g
Ashley Zhang	g
Sabrina Yang	8
Eddie Kranz	6
James Jovanovski	6
Lan Linh Nguyen	6
Shengjie Niu	6

Name	Views
William Liu	1537
Charles Qu	1395
Theodore Chandra	1233
Abigael Angela Pardede	1211
Erik Hai	1181
Xiaoteng Ma	1116
Aidan Robinson	1046
Wanting Wang	1035
Jasmine Hwee Ying Lai	988
Jason Wang	923

Name	Hearts
Jialing Tong	26
Yihang Liu	21
Eddie Kranz	21
Ruixuan Wang	21
Erik Hai	20
Chen Loi	19
Chloe Xiao	17
Henry Yuen	14
Thomas Nguyen 💎	13
Jing Weng	11

Top endorsed	
Name	Endorsements
Anqi Wu	0
Rodrigue Ntagashobotse	0
Huan Vo	0
Addison Lu	0
Chin-An Liu	0
Chenle Li	0
Suebin Lee	0
Wendy Wang	0
Jiachen Deng	0
Anna Yang	0

Ed Discussion - Staff Engagement



Name	Answers
Mark Denisov STAFF	70
Kshitiz Bhargava STAFF	63
Hunter Xu STAFF	56
Iwan Budiman STAFF	41
Mehdi Nobakht STAFF	11
Rahul Gopinath STAFF	1
Amanda Turner STAFF	0
Ross West STAFF	0

Name	Comments
lwan Budiman STAFF	32
Kshitiz Bhargava STAFF	32
Mark Denisov STAFF	25
Hunter Xu STAFF	23
Mehdi Nobakht STAFF	6
Rahul Gopinath STAFF	1
Amanda Turner STAFF	0

Name	Views
Iwan Budiman STAFF	1705
Mark Denisov STAFF	1020
Hunter Xu STAFF	592
Kshitiz Bhargava STAFF	379
Mehdi Nobakht STAFF	338
Rahul Gopinath STAFF	42
Ross West STAFF	5

Top hearted	
Name	Hearts
Hunter Xu STAFF	135
Mehdi Nobakht STAFF	134
Kshitiz Bhargava STAFF	50
Mark Denisov STAFF	48
lwan Budiman STAFF	24
Rahul Gopinath STAFF	3
Amanda Turner STAFF	0
Ross West STAFF	0

Name	Endorsements
Mehdi Nobakht STAFF	0
Amanda Turner STAFF	0
Hunter Xu STAFF	0
Mark Denisov STAFF	0
lwan Budiman STAFF	0
Kshitiz Bhargava STAFF	0
Rahul Gopinath STAFF	0
Ross West STAFF	0

UoS Feedback and USS





Feedback From Teaching Team

- 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 tutorial materials and project requirements, proving their diligence
- Discussed issues with fellow students and helped one another

Feedback From Teaching Team

- 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; find and fix 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 2025

- 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 2025

- 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:
 - JB HiFi Gift Cards totaling \$2500

Unit of Study Survey 2025

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

COMP5347

https://student-surveys.sydney.edu.au/s/uss948308

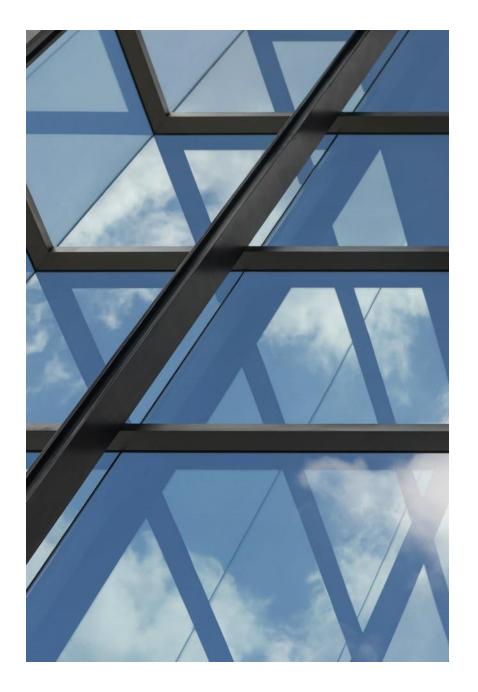




COMP4347

https://student-surveys.sydney.edu.au/s/uss948272

Exam Info. & Preparation





Exam Information

- Check Exam Timetable for details
 - 18 June 2025 at 5pm (AEST) and different venue
- On-campus closed-book paper-based 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!
- Not well before the exam
 - Apply for special consideration ASAP.

Exam Preparation

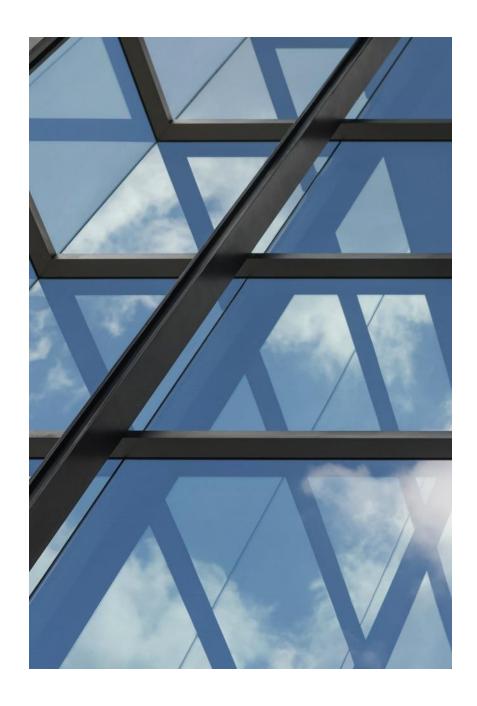
- All materials covered from week 1 to week 11 (except week 9)
 - Lecture slides (and supporting resources/references)
 - Tutorial materials
 - Assessments
 - quizzes and assignments
- Industry/guest presentation(s) NOT included (not examinable)
 - Presentations on week 9 and week 12
 - React client-side framework
 - Cloud native modern Web Apps
- Study circles
 - Prepare with a group of classmates
 - Prepare and ask questions, answer questions, and give feedback
 - Weekly practicing; lectures, tutorials and assessments
- Exam related questions on Ed board (use "Exam" category)

Pass Requirement

- Exam is worth 55% of your total mark
 - Exam is marked out of 100
- To pass this unit
 - You need to get at least 40% in the exam AND
 - You need to get <u>at least 50%</u> overall mark

Exam Structure





- NO Multiple-Choice Questions
- Multiple question types and formats
 - Some have multiple parts
 - Short (3), medium (1) and long (1) answer questions
 - Scenario-based questions
 - Explain, discuss and describe concept/process/method/technique
 - Coding questions (write code, answer questions about given code)

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.

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.
- E.g., explain the script in line XXX in detail.

Modifying code question(s)

- Read and understand the requirements
- Scenario-based question(s)
- Your code must compile and run successfully
- Your code must produce correct output/intended behaviour
- E.g., complete the missing code to implement some functionalities and/or change the behaviour of existing one

Exam Technique and

Advice





Exam Preparation

- Lecture slides and tutorial materials
- 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
- Sample exercise questions will be available on week 14
- On-going study and practice:
 - Study, practice and learn
 - Be efficient and effective
 - Be succinct (quality not quantity)

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
- Write 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

Special Consideration (University Policy)

- If you are unwell, and it seems that you won't be able to demonstrate your knowledge/skill properly before the final exam, please request special consideration
- If you become sick during the exam itself, raise hand and speak to the invigilator
- 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/

Academic dishonesty and plagiarism

- Please read the University policy on Academic Honesty carefully:
 http://sydney.edu.au/elearning/student/El/academic_honesty.shtml
- All cases of academic dishonesty and plagiarism will be investigated
- There is a process and a centralized University system and database
- Two Common Types of Academic Dishonesty (there are others):
 - Plagiarism when you copy from another student, website or other source. This
 includes copying the whole assignment or only a part of it.
 - Academic dishonesty when you make your work available to another student to copy (the whole assignment or a part of it). There are other examples of academic dishonesty.

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

Support services



The Office of Educational Integrity

Report anonymously or seek advice:
 <u>educational.integrity@sydney.edu.au</u>

Learning Hub

- The <u>Learning Hub</u> (<u>Academic Language</u>
 and <u>Learning</u>) offers workshops, online
 resources and individual consultations on
 study and writing skills.
- The <u>Learning Hub (Mathematics)</u> offers bridging courses, drop-in services and online resources.

Library

- Check out the <u>Library's</u> online resources and <u>referencing and citation styles</u>.
- You can also chat with a <u>Peer Learning</u>
 <u>Advisor</u> about your studies, including
 referencing questions

Counselling and mental health support

The University's <u>Counselling and</u>
 <u>Psychological Services</u> provide self and time-management workshops and online resources.

Special Arrangements and Consideration

 Apply for special consideration if impacted by short-term illness or misadventure

Disability Services

Register for <u>Disability Support</u>

Student organisations

- SRC (undergraduate students)
- SUPRA (postgraduate students)

THANK YOU!

All the Best in your Future Study and Career!



