0. Introduction

Jin Hong

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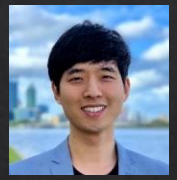
0. Introduction: outline

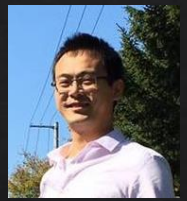
- Team
- Location
- Schedule
- Assessments
- Remember

Team

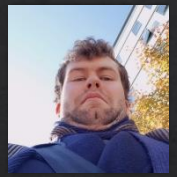


Jin Hong
Unit coordinator
Room 1.10
jin.hong@uwa.edu.au

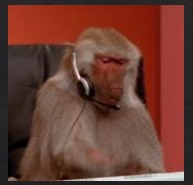
Larry Huynh
Lab facilitator
Room ???
larry.huynh@.uwa.edu.au



Weiyan Xu
Lab facilitator
Room: ???
weiyan.xu@research.uwa.edu.au



Alex Brown
Hacking Guru
Room ???
email@student.uwa.edu.au



Bradan Beaver
Hacking Guru
Room ???
email@student.uwa.edu.au

Teaching Operations (team)
Admin team
Room: Main reception
teachingops-team2@uwa.edu.au

Emergency

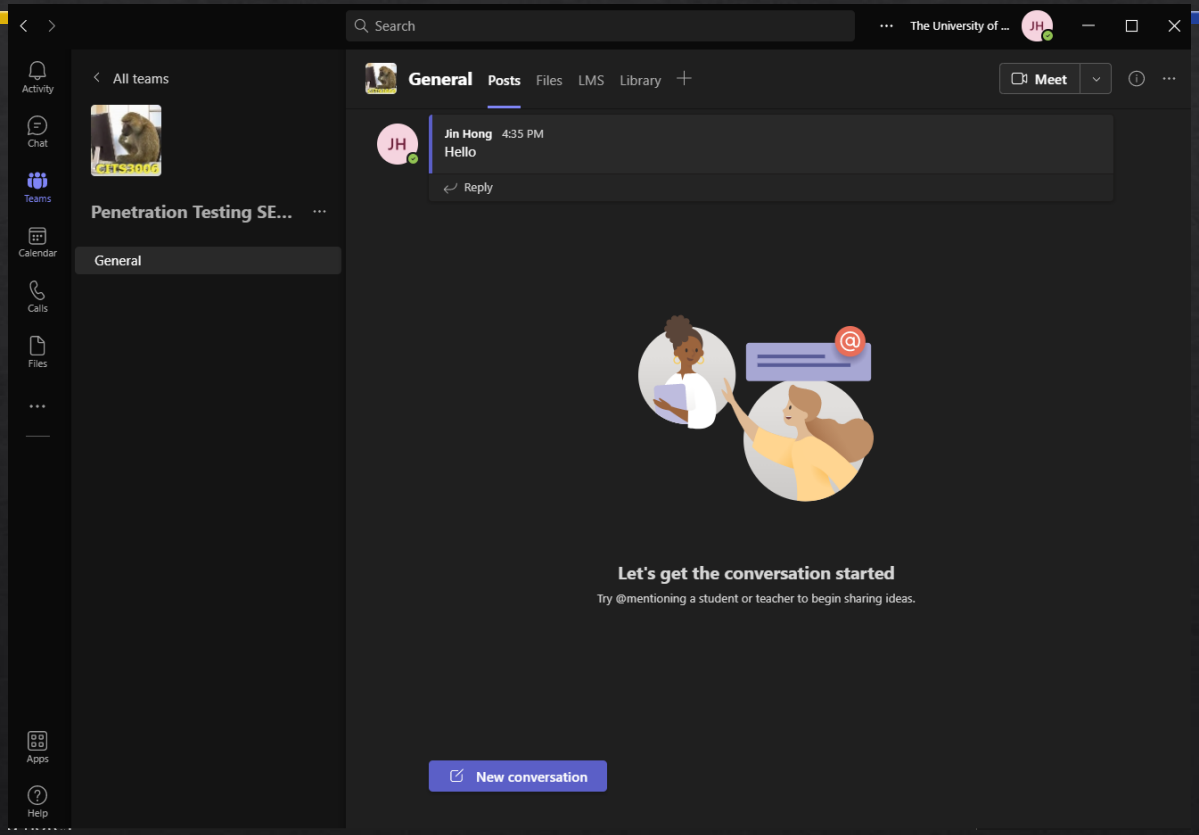
- General emergency: call campus security at 6488 2222
- In super emergency: call emergency at 000
- In all buildings, we have an emergency procedure such as this picture ->
  - Please take a time and read it.
- For more details, please have a read through our emergency procedure for various potential incidents
  - http://www.safety.uwa.edu.au/incidents-injuries-emergency/procedures

Location

- Lecture
  - Venue: PHYS 243 Clews Lecture Theatre
  - Time: Mondays 1pm - 3pm
- Labs
  - Lab 1: CSSE 203
  - Time: 10am – 12pm
  - Lab 2: MATH123
  - Time: 11am – 1pm
- Consultation
  - Office at Computer Science building room 1.10

Changes will be announced (if any)

Location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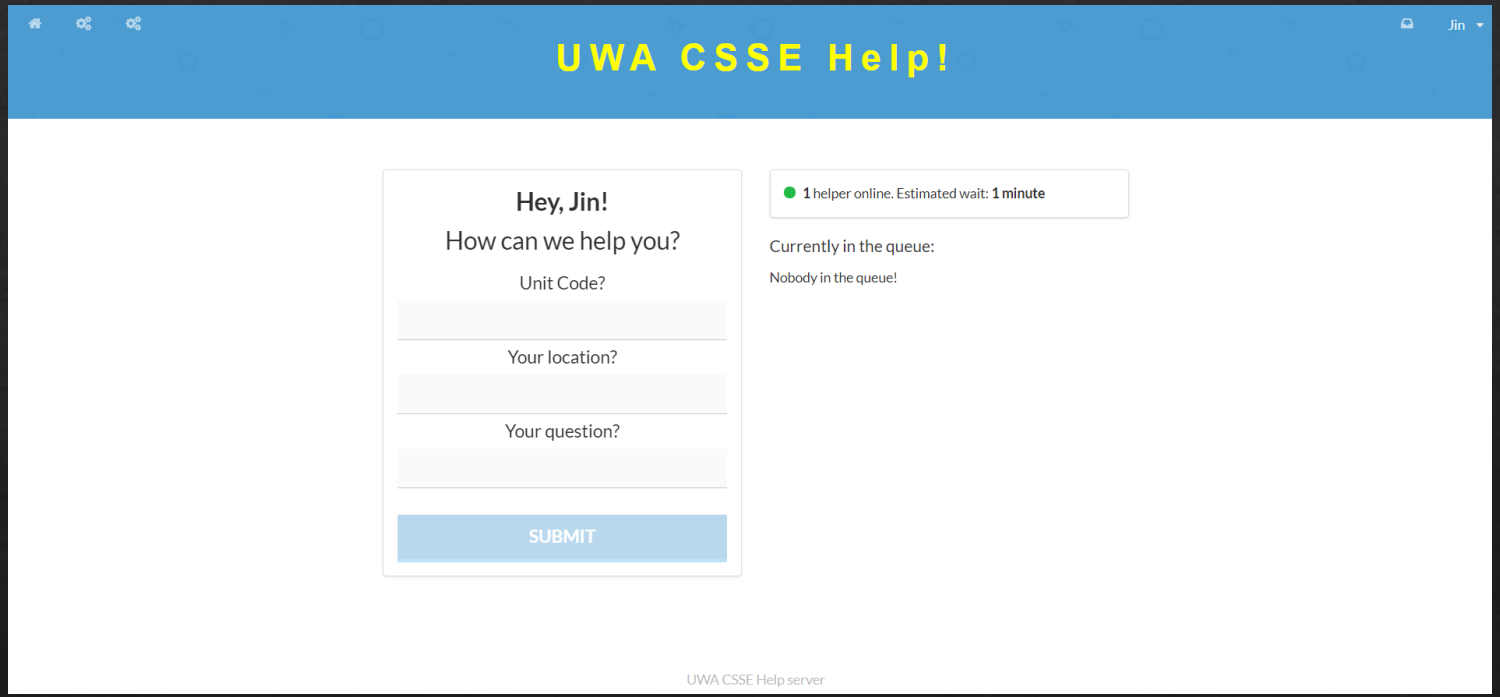
Help
All teams
Penetration Testing SE...
General
General
Posts
Files
LMS
Library
Meet
Jin Hong 4:35 PM
Hello
Reply
Let's get the conversation started
Try @mentioning a student or teacher to begin sharing ideas.
New conversation

Labs – Help server



Labs – Help server

- For labs, we will be using the help server, which allow students to queue to get help
  - This means no fighting over who put their hands up first
  - Online people can get noticed better!
  - Please note, You won't get help **outside** the scheduled lab hours!

- How it works:
  1. Login to the help server at: https://help.jinhong.org/
     - by default, you use your student ID with temporary password “helloworld”
     - You can change your password once you login (you have to re-login after)
     - Any issues logging in, contact any of the facilitators or the UC
  2. Fill out the form and wait until a facilitator comes to you!
     1. Note: for the location, write the desk number for F2F students, and "online" for online students.
  3. If you are doing labs via online, then the facilitator will contact you via Teams!

Course overview: Term 3

Labs start first week!

Week	Lecture	Lab	Assessments
1	Ethics + Reconnaissance	Lab 0: Setup and Linux	
2	Network Exploits + Malware	Lab 1: Network Exploits	
3	More Malware	Lab 2: Malware	
4	Reverse Engineering		Lab Quiz 1
5	Application Security	Lab 3: Reverse Engineering	
6	Privilege Escalation	Lab 4: Application Security	

Course overview: Term 4

Week	Lecture	Lab	Assessments
7	Active Directory		Lab Quiz 2
8	Web Security	Lab 5: Active Directory	Project out
9	Defence Techniques	Lab 6: Web Security	
A	Social Engineering		Lab Quiz 3
B	Cloud Security		Project due/demo
C	Guest Lectures (+ Revision)		Project demo

Assessments

Assessment Item	When	Covers	Worth (total)
Lab Quizzes	Weeks 4, 7, A	The two labs before	60% (20% each)
Project			
Stream 1: Group Project	Week 8	Various	40%
Stream 2: Study Tour*	After the exam period	Various	40%

*Please note, the study tour is a failed component (i.e., if you fail this, you fail the unit).

Please note, all dates are tentative and subject to change!

How does the lab quiz work?

- During your scheduled lab time, you will be supervised by a lab facilitator to complete a timed lab quiz (~60 mins but can vary).
- You cannot receive mark if your attendance is not confirmed by the lab facilitator.
  - i.e., you must be supervised/invigilated by the lab facilitator to receive marks.
  - Attendance is required for all F2F students (unless a reasonable excuse is provided).
  - Online supervision will be done via MS Teams for online students only.
- You may be given a few slots during the labs, which you can sign up before the lab quiz starts (tbc).

Project

- The project consists of two streams
  1. Group project handling various penetration techniques and cybersecurity concepts
  2. Cybersecurity Practices and Cultures (Study Tour)

Stream 1: Group Project

- Details to be confirmed but I am thinking:
  - You will be put in a group
  - Part 1 (50%) : You will be given a VM or a server with multiple vulnerabilities that you must exploit
  - Part 2 (30%) : You will be asked to harden the VM or a server you were given but leave 2 vulnerabilities
  - Part 3 (20%): You will exploit another group's VM or a server after hardened
  - You will submit accompanying reports (group and individual)
  - Each part will be 1 week long.
  - But TBC.

Stream 2: Study Tour

Please note, this is a **FAILED COMPONENT**

- i.e., you must pass this assessment to pass the unit if selected
- The assessment includes attendance and a group project

You must also complete Project Stream 1 (group project).

Study tour to Korea between 14 November – 3 December (3 weeks)

- Funded travel by NCP ($3000 per student)
  - To cover flight, accommodation and meals, further costs are covered by students

Stream 2: Study Tour

How to apply?

- Application essay - write at most one page about:
  - Why you want to participate in this study tour
  - Why you are a good candidate for this study tour
  - How can this study tour help you advance your career

Submit via Email
(due this Friday noon)

- 15 slots available for eligible students:

  *Not available for previous NCP recipients (you know who you are)

  *Australian citizens only

  *Age between 18 – 28

- Please note, you should have a reasonably high WAM (65+)

Prerequisite

- Prerequisites: 12 points of programming-based units
- This unit requires the student to be knowledgeable in various aspects of CS.
- Recommendations if you haven't done already:
  - CITS1003 Introduction to Cybersecurity
  - CITS2002 Systems Programming
  - CITS3002 Computer Networks
- This unit expects students to be knowledgeable in various programming languages such as Java, Python and C (or be able to quickly catch up).
- You should also be familiar with basic discrete mathematics and number theory.
- I highly recommend taking this unit in third year after taking various CITS units (including ones listed above) for preparations.

Please note

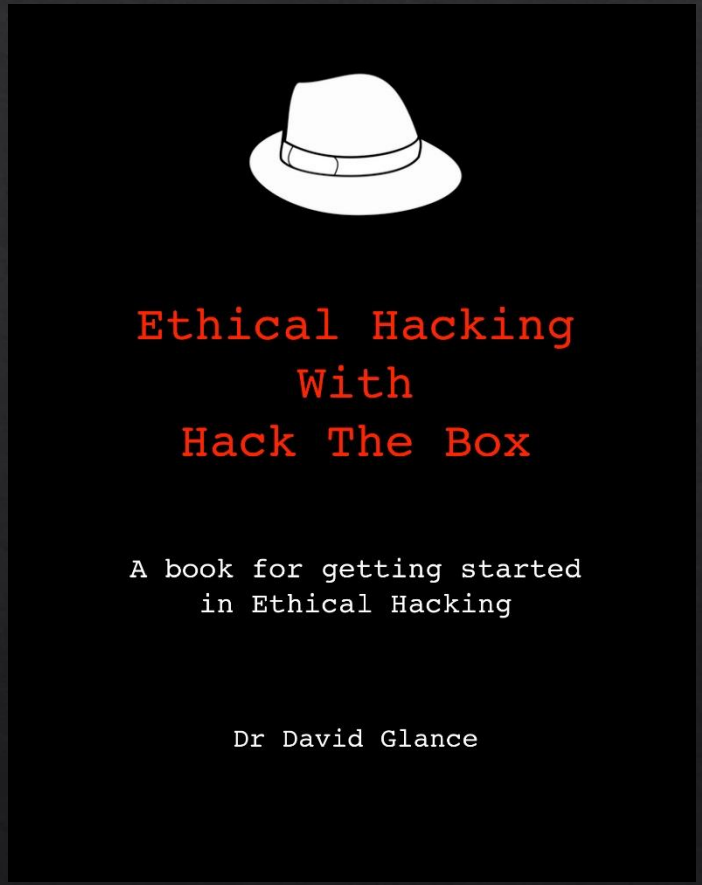
- This unit is/does NOT:
  - cover a comprehensive penetration testing techniques
    - Pentesting and cybersecurity is a broad discipline!
  - about all of the latest and greatest attacks
    - Covering selected but important fundamental themes
    - Read online sources instead to keep up to date
  - cover ethical, legal or economic issues
    - We will touch on ethical issues briefly later, but not focus on them

Please note

- Lectures provide **theoretical** and **conceptual** understandings of the topics presented
  - But we will also do some practicals in the lectures
  - So, you should bring your laptop if you want to try them in class as well
- Labs and project provide **practical skills** of the topics presented
- The contents in Lectures, labs and project will be related, but they are all **INDEPENDENT** learning materials
  - i.e., you will be learning new things in each lecture, lab and project.

Recommended reading

- Ethical hacking with Hack The Box
- A book by David Glance (former UWA academic)
- Available free online:
- https://book.ethicalhackinghtb.xyz/



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