## IFS4103: Penetration Testing Practice

Lecture 9: Project 2 Updates, Admin Matters, Coaching & Consultation by Ensign

#### **Outline**

- Project 2 updates
- Other course admin matters
- Pen-testing coaching & consultation (by Ensign)
- Web attack reviews (if time permits)

## **Project 2 Updates**

### **Tentative Schedule**

IFS4103 Tentative Schedule: Semester 2 AY2023/24 (January-April 2024)													
Week No	Date (Thur)	Agenda	Activity Type  Lecture Consultation Presentation Lab Client Meeting				Client Meeting						
1	18-Jan	Introduction to pen-testing, course administration											
2	25-Jan	Pen-testing methodology & management, CVSS + lab tasks											
3	01-Feb	Web app pen-testing review, release of group assignment + lab tasks											
4	08-Feb	Burp & web pen-testing sharing + lab tasks											
5	15-Feb	Burp & web pen-testing sharing + lab tasks											
6	22-Feb	Scoping meeting of NUS apps (teams to possibly pen-test both apps)											
Recess Week (29-Feb, Follow-up meeting of NUS apps for credential issuance matters if still needed)													
7	07-Mar	Group-based web vulnerability & exploitation sharing											
8	14-Mar	Group-based web vulnerability & exploitation sharing											
9	21-Mar	Pen-testing of NUS apps & consultation											
10	28-Mar	NUS Well-Being Day (no class)											
11	04-Apr	Pen-testing of NUS apps & consultation											
12	11-Apr	Internal-group presentation & discussion											
13	18-Apr	Final pen-testing presentation with clients, module wrap-up											
		Sessions conducted by SoC											
		Sessions conducted by Ensign											
		Session conducted together by SoC & Ensign											

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#### **Account Matters**

#### App 1 (Peer Review):

- Student accounts are not usable
- The required workflow: Dept Admins need to initiate reviews first
- Please refer to Slides 5 & 6 of the updated presentation slides: included as the next 2 slides

#### • App 2 (NSWS):

- Account issues?
- App access issues?

## **Work Flow**



1. Dept Admin Initiate Review

2. Reviewer's Inputs

3. HOD's Approval

4. Dean's Approval

5. Reviewee's Comments





## Role based Info:

Group ID	Dept	Dept Admin	Reviewers	HOD Approver	Dean Approver	Reviewee
1	NUS IT	CCETET07 CCETET10	[Reviewer 1] CCETET04 CCETET08 [Reviewer 2] CCETET05 CCETET09	CCETET02	CCETET06	CCETET01 CCETET03
2	Physics	CCETST72 CCETST75 CCETST77	[Reviewer 1] CCETET14 CCETST73 [Reviewer 2] CCETET14 CCETST73	CCETET12	CCETET16	CCETET11 CCETET13 CCETST76
3	Chemistry	CCETET23 CCET0049 CCET0051	[Reviewer 1] CCETET20 CCETET24 [Reviewer 2] CCETET21 CCET0048	CCETST81	CCETET22	CCETST80 CCETET19 CCET0050
4	Computer Science	CCET0058 CCET0061	[Reviewer 1] CCET0055 CCET0059 [Reviewer 2] CCET0056 CCET0060	CCET0053	CCET0057	CCET0052 CCET0054



## **Project 2: Weightage & Team Formation**



- Total weightage: 50%
  - Findings & report: 30%
  - Presentation (Week 12): **10%**
  - Combined/delivered final report & client presentation (Week 13): **5%+5%**

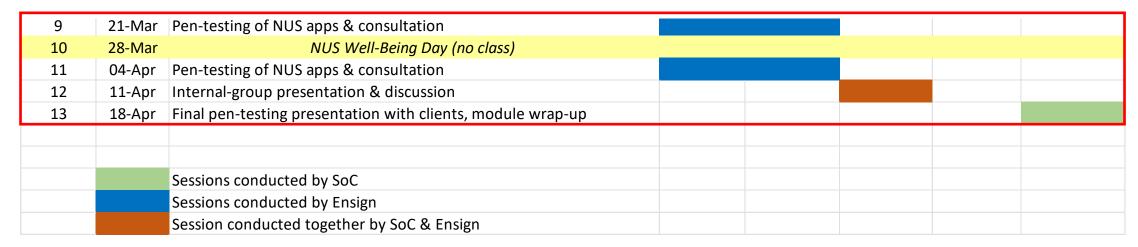
#### Team formation:

- Four teams of 5-6: please refer to my Canvas announcement
- Teams 1 & 2: each works on NUS target system #1, to form Team A for the final presentation
- Teams 3 & 4: each works on NUS target system #2, to form Team B for the final presentation
- Note: depending on the 2 NUS apps, each team may pen-test both apps

### **NUS App Allocations & Tasks**

#### • Teams 1 & 2:

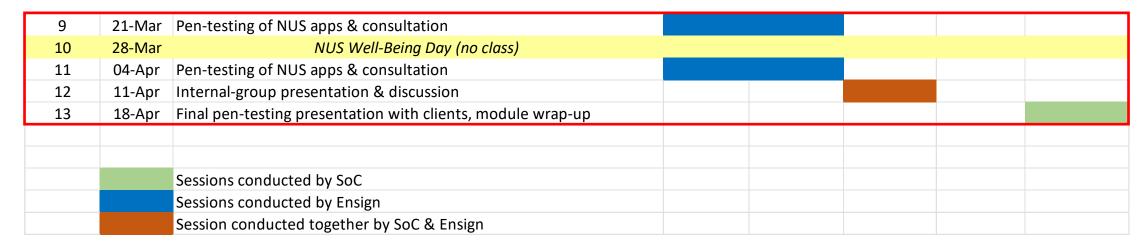
- Should focus on **pen-testing App 1 (Peer Review)**: in Weeks 9-12
- Can additionally pen-test App 2 (NSWS): in Weeks 9-12
- Need to separately report + & present on App 1: in Week 12
- To form **Joint Team A**: right after the presentation in Week 12
- To submit the **report & present** on App 1: in Week 13



### **NUS App Allocations & Tasks**

#### • Teams 3 & 4:

- Should focus on **pen-testing App 2 (NSWS)**: in Weeks 9-12
- Can additionally pen-test App 1 (Peer Review): in Weeks 9-12
- Need to separately *report* + & present on App 2: in Week 12
- To form **Joint Team B**: right after the presentation in Week 12
- To submit the **report & present** on App 2: in Week 13



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### **Project 2 Report: Assessment Rubrics**



- The total marks possible for Project 2 report: 100
- Components/criteria:
  - Vulnerability findings & validations reported: 50\*
  - Report writing: 50\*
    - Section completeness: **15**
    - Finding-details (including impact, mitigation) explanation writing & style: 20
    - Report clarity/readability: 15

**Note:** \* The ratio can be adjusted *if needed* 

## **Project 2 Presentation: Assessment Rubrics**

- The total marks possible for each project presentation: 100
- Components/criteria & respective weightages:
  - Slide content, lay-out & design, clarity/readability: 50
  - Presentation: **35**
  - Q&A: **15**

## **Projects 1 & 2: Team Diary**



- Each team keeps a **diary** (with shared editing)
- Could use Google Doc (requires Gmail IDs) or maybe Microsoft Teams (?)
- Record what each team member is doing:
  - Each team member should edit *his/her own text* only
  - Include date for each added entry
  - Use it as append-only document: even if you could re-edit past entries, just do it as a change-log while keeping the original past entries
- Free-format except for above rules

## **Important Dates (1/2)**



- Four internal teams' pen-testing report submission:
  - Week 12: Thursday, 11 April, 2:00pm (before our class)
  - Submit your PDF report to Canvas assignment: Project-2-Report
- Four internal teams' findings presentation:
  - Week 12: Thursday, **11 April**, **2:00pm** (before our class)
  - Submit your slides to Canvas assignment: Project-2-Slides
  - Each presentation is **30 minutes** (including demo), followed by **15 minutes** of Q&A and feedback
  - Presentation order: TBD

## **Important Dates (2/2)**



- Two joint-teams' **presentation dry-run** (*not* graded):
  - Week 12 or 13: on your own  $\rightarrow$  *online?*
- Two joint-teams' final pen-testing report submission:
  - Please email me your joint team's PDF by <u>Tuesday</u>, 16 April, 7:00pm
  - I'll email back the commented PDF by Tuesday, 16 April, 11:59pm?
  - Please email me your revised/final PDF by Wednesday, 17 April, 2:00pm
  - I'll email the final report to NUS IT by Wednesday, 17 April, 3:00pm
- The findings presentation sessions with NUS:
  - Week 13: Thursday, **18 April, 2:00-5:00pm** (during our class)

## **Other Course Admin Matters**

#### **For Weeks 9 & 10**

#### • Week 9:

- Report account-related matters, if still any: by the end of Week 9
- Email **Project 1 marks**, if you missed it: by the end of Week 9

#### • Week 10:

- Project 1 peer review submission
- Project 1 mark calculation
- Share your P2 team's **diary** via .....
- No class next week!
- **But**, keep on pen-testing!
- If you have questions for Ensign??

# Pen-Testing Coaching & Consultation (by Ensign)

# Web Attack Reviews (If Time Permits)

## Thanks! Enjoy your NUS Well-Being Day