SECURITY (COMP141) Week 1

Lecture 1.1: Introduction

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Module TL;DR

- How to (abstractly) think about security?

- Vulnerabilities vs. threats vs. capabilities

- Non-technical aspects
  - Social, economic, and political incentives

- Technical aspects
  - Purpose and limitations of security mechanisms
  - Vulnerabilities, attacks, and defenses

Tentative Topics

Week 1: Security policies

Week 2: Security principles

Week 3: Confidentiality

Week 4: Integrity

Week 5: Availability

Week 6: Human-centred security

Week 7: Authentication

Week 8: Access control

Week 9: Network/Web Security

Week 10: Online Harms (tent.)

NB: Reading Week is "Reading Week" and not Week 6!
Week 6 = 1st week after Reading Week

Schedule 1/1

- Lectures: Videos and slides will be posted online no later than Mondays

- Tutorials: Led by TAs on Thursdays (in person)
  - 09:00-11:00 GRP1
  - 12:00-14:00 GRP2

- Tutorial exercises available the week before, and solutions on Thursdays after the tutorial

- No tutorial on Week 1

Schedule 2/2

- Website: https://moodle.ucl.ac.uk/course/view.php?id=29987

- Assessment: 100% exam in Term 3

- Quizzes: Weekly (unmarked!) 3-6 question quiz to confirm your understanding of the lecture material

Make sure you are enrolled on Moodle!

Office Hours

- Thursdays 11:00-12:00, *booking required*

- In person, at 169 Euston Road – book using **this link**

- On Zoom – book using **this link**

Readings

- The Internet is vast! Information is not always trustworthy, but still good to read lots of news articles, Wikipedia, etc.

- Will link to (free) chapters from Ross Anderson's textbook "Security Engineering" when appropriate:

  o http://www.cl.cam.ac.uk/~rja14/book.html

- Slides and Moodle page will also have links to papers and articles

Disclaimer

- We will learn about attacks in this module
  - It is good to study and experiment with attacks to understand how they work, but only in an experimental setting!

- It is not acceptable/ethical/legal to attack live third-party systems

- The Information Security research group runs a hacking seminar and the link to participate will be posted on Moodle

WITH GREAT
POWER
COMES GREAT
RESPONSIBILITY

PETER PARKER is SPIDER MAN