F20AN/F21AN Coursework Description

The coursework is to be completed by groups of **TWO** students. Both students must contribute to all components of the coursework.

Coursework Components and Assessment

The coursework is worth 25% of the course. For students registered in F20AN, the coursework will be marked out of 40 marks; for students registered in F21AN, the coursework will be marked out of 50 marks. The coursework has two or three components, depending on your course registration:

- 1. A single, group report: worth 20 marks, about 1,500 words in length (excluding diagrams, such as screenshots) and no more than 1,700 words.
- 2. A presentation of your work: worth 20 marks, consisting of a recorded video of between 15 and 20 minutes in duration. The presentation should include a demo appropriate for the selected topic in addition to your slides. The presentation (including demo) should show a good understanding of the topic by both students.
- 3. <u>(F21AN students only)</u> An individual report worth 10 marks. Each F21AN student in a group should prepare a short report (about 500 words, and no more than 600 words) that critically reflects on the use and the impact of the chosen tool/attack on industry, end-users, and society. The individual report must be prepared separately by each F21AN student, on their own.

These components must be about the same topic. Each group will choose one topic, write a report, and record a presentation (including demo).

The report and presentation should provide a short introduction and conclusion to the chosen topic, describe the tool/attack and explain how it works, and discuss its use/mitigation. Demo screenshots should be included in the report and presentation. The introduction should clearly specify the contributions of each group member to the project.

In order to support the further learning of different network security topics by students in the class, selected presentations will be made available for all other students in the class to view on Vision.

Coursework Topics

Topics can focus on either a security tool, or a security attack. In general, a study of a "tool" should involve a broad exploration of a tool's functionality (e.g., purpose, how it works, some example uses or attacks), while a study of an "attack" should involve a detailed exploration of a particular attack (e.g., how/why it works, attack mitigation) involving some technical component, such as programming and an environment created/built by the group members.

Groups **must propose a topic** and the names of the group members by <u>Friday</u>, 5th <u>February</u> (end <u>of week 4</u>). There will be a submission link on Vision for submitting your proposal. Your proposal must include a project title, names of proposed group members, a short description of what you plan to do for the project, i.e., will you focus on describing and demonstrating a security tool or a security attack. The sooner you propose a topic, the sooner we can give you **approval** to work on your topic and the better chance you have to work on the topic of your choice. In particular, note that **topics will be approved on a "first-come, first-served" basis** so that each group will work on a different topic.

If you are having trouble finding a partner for the project, you might use our discussion forum (on Microsoft Teams) to ask other students to form a partnership with you. Students who don't have a partner by the end of week 4 will be randomly allocated a partner at the start of week 5.

Environment

For demo purposes, you can use either two computers, or one computer with one or more virtual machines running on top of it. You should be careful if the demo is running against your (host) OS as it could use data loss/OS crash. (If you are using the University computer, you should only use VMs, and take care to not communicate with the host computer or Internet.)

ETHICAL REMINDER/WARNING: ONLY RUN YOUR HACKS ON AN INFRASTRUCTURE THAT BELONGS TO YOU.

Submission

The submission of <u>soft-copies of the group report</u>, <u>individual report (F21AN students)</u>, <u>and recorded presentation video and presentation slides</u> is to be done through Vision (see "Assessments" section on Vision for instructions and submission deadline). For selected projects, we may ask the students to run an additional demo session to review the technical detail of the project for any of the groups.

Avoiding Plagiarism

This is a reminder that you need to complete your coursework on your own with your group partner. Here are some further points to take into consideration, where "you" refers to either, or both group members (except for the individual report for F21AN students, which must be completed individually by each student). Both student members should contribute to all components of the coursework.

- Coursework reports must be written in your own words and any code in your coursework
 must be your own code. If some text or code in the coursework has been taken from other
 sources, these sources must be properly referenced.
- Failure to reference work that has been obtained from other sources or to copy the words and/or code of another student is plagiarism and if detected, this will be reported to the School's Discipline Committee. If a student is found guilty of plagiarism, the penalty could involve voiding the course.

- Students must never give hard or soft copies of their coursework reports or code to another student. Students must always refuse any request from another student for a copy of their report and/or code.
- Sharing a coursework report and/or code with another student is collusion, and if detected, this will be reported to the School's Discipline Committee. If found guilty of collusion, the penalty could involve voiding the course.
- And remember: the consequences of taking unacceptable short cuts in coursework are much
 worse than getting a bad mark (or even no marks) on a piece of coursework. There has been
 one case this year where a student was awarded on Ordinary degree (rather than an
 Honours degree) because of the sanction imposed by the University's Discipline Committee.
 The offence was plagiarism of coursework.
- Further information on academic misconduct can be found in: https://www.hw.ac.uk/students/doc/discguidelines.pdf

Your coursework submissions will be automatically checked for plagiarism.

Late Coursework Submissions

Coursework that is submitted within a maximum of 5 days late will receive a standard 30% deduction. Coursework submitted more than 5 days late will not receive a mark, nor any formative feedback. Note that in both cases this means 5 *working days*.

A coursework is considered late until all components have been submitted, i.e., the group report, presentation video and presentation slides, individual report (F21AN students only). As noted above, groups doing a live presentation can submit their slides by emailing them to me after their scheduled presentation time.