FSEM 1111 Computer Security – from a Free Software Perspective

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README

http://grothoff.org/christian/teaching/2007/1111/

Overview

- Philosophy: Freedom and Privacy

- Technology: UNIX, LaTeX, Cryptography

- Legalities: Copyright, Trademarks, Patents

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Philosophy

- Philosophy aims to discover fundamental truths about the world.

- Ethics is an area of philosophy that is concerned with defining how one should live – what is right, and what is wrong.

$\Rightarrow$ Understanding of philosophy enables ethical decision making

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Technology

- Not everything that is desirable is technically possible.

- Technology not only determines what is possible, but also provides knowledge about advantages and disadvantages of possible solutions.

$\Rightarrow$ Understanding of technology is fundamental to the discussion of certain philosophical questions!

A good way to learn about technology is to **use** it.

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Law

- Ideally, law is a formalization of what a culture perceives as ethical.

- In reality, law is created by social and economic processes.

- Laws can restrict or mandate the use of technology.

- Laws can enable or restrict ethical behavior.

$\Rightarrow$ Understanding of law and technology enables determining the boundaries of legal ethical behavior.

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Philosophy

We will study and discuss debates on:

- Privacy

- Copyright

- Patents

- Digital Rights Management

Technology

You will learn about:

- UNIX – computer security, standards, free software

- LaTeX – computer security, scientific writing, standards, free software

- Cryptography – computer security, patents, free software

- Subversion – computer security, free software

Laws

You will learn about:

- Trademarks, Patents and Copyright

- Software Licensing

- DRM

Expectations

- Demonstrated understanding of technology

- Critical thinking

- Concise and precise reasoning in written assignments

Grading Policies

- Homeworks: 70 pts

- Midterm: 30 pts

- No curve

Grades

$>$ **85** A

$>$ **70** B

$>$ **55** C

$\geq$ **40** D

$<$ **40** F

Grading Criteria

40% Demonstrated understanding of the material (be it technology, law or philosophical view points)

30% Quality of the argumentation or design in terms of reasoning, structure and ambition

20% Typesetting quality

10% English style

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Submission

All assignments must be type set in LATEX

All assignments must be submitted using Subversion

All assignments must be submitted before class on the due date

Exceptions may be given in rare cases (such as medical emergencies) – check with me **before** the deadline

Late submissions earn **zero** points.

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Definition: Plagiarism

Plagiarism is the presentation of another person's idea or product as your own. Plagiarism includes but is not limited to the following:

• Copying word-for-word all or in part of another's written work;

• using phrases, charts, figures, illustrations, graphics, codes, music, mathematical, scientific solutions without citing the source;

• except for common knowledge, paraphrasing ideas, conclusions, or research without citing the source;

• using all or part of a literary plot, poem, film, musical score, Internet website or other artistic product without attributing the work to its creator.

Academic dishonesty for FSEM

- You are encouraged to discuss the materials, homework, and projects together.

- However, all written assignments and programs must be done individually.

- Academic dishonesty includes, but is not limited to: plagiarism, cheating in exams, unauthorized collaboration and falsifying academic records.

Academic dishonesty: consequences

Academic dishonesty may result in a grade penalty on assignments, an "F" in the course, dismissal from an academic unit, revocation of admission, suspension from the University – or worse.

Details depend on the seriousness of the violation.

If you are afraid to fail, talk to your instructor and/or academic advisor.

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Class Participation

- You are **welcome** to voice your opinion.

- If you can, ask questions in class rather than during office hours.

- I do **not** take attendance. Students who fail to attend regularly tend to fail courses.

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Office Hours

- If it takes you more than an hour to figure out a problem, you should contact me (e-mail, office hours).

- Check in at least once a month for general advising.

- Even during posted office hours, I may have to step out briefly. Check back 5-15 minutes later.

- E-mail is a convenient alternative for certain questions.

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E-mail

- Do **not** send Microsoft Office attachments.

- Try to state your problem precisely and in reasonable English.

- If you do not receive a reply within 24h, **I** most likely never got your e-mail.

Phone

- You can call my office (303-871-2392).

- I do not have a regular phone at home.

- 90% of the time you will have to leave a message.

- 99% of the time you will get an answer faster via e-mail.

Questions

?

Homework

- Start reading the subversion manual and visit `https://svn.cs.du.edu/`.

- Sign up for a subversion account.

- Play around with the Debian system.

- If you're daring, install Debian GNU/Linux on one of your own machines.

Advising

- Found your classrooms?

- Got your textbooks?

- Is your schedule manageable?

- What is the hardest thing for you right now?

Reasoning about Current Issues

- The login is "issues" and the password is "thinking".

- Required for Winter registration!

$\Rightarrow$ Do it now!