An Introduction to FOSS

COMP8440: FOSSD
Lecture 1

What is FOSS?

- Free and Open Source Software
  - What does 'free' mean?
  - Does providing source make it Open Source?
  - Who makes FOSS? Why do they do it?
  - Is FOSS just for fanatics and hobbyists?
  - Can you make money with FOSS?
  - Does FOSS make for better software?

The many facets of FOSS

- FOSS is different things to different people
    - Some see it as a resource
    - Some see it as an ethical choice
    - Some see it as a technical choice
    - Some see it as the enemy
    - Some see it as just another type of software

What is FOSS to you?

Free as in Freedom

"Free software" is a matter of liberty, not price. To understand the concept, you should think of "free" as in "free speech," not as in "free beer"

(Richard Stallman, The Free Software Definition)

The Four Freedoms

The freedom to run the program, for any purpose (freedom 0).
The freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this.
The freedom to redistribute copies so you can help your neighbor (freedom 2).
The freedom to improve the program, and release your improvements (and modified versions in general) to the public, so that the whole community benefits (freedom 3). Access to the source code is a precondition for this.

(Richard Stallman, The Free Software Definition)

Open Source

- Open Source definition
  - Open Source Initiative holds Open Source trademark
  - Stewards of the Open Source Definition
  - Similar in spirit to the four freedoms, but different emphasis

Let's have a look at the Open Source Definition:
http://www.opensource.org/

How big is FOSS?

- ## How many projects?
  - Certainly in 100s of thousands
  - Over 230,000 projects registered on one site alone (sourceforge.net)
  - Similar number of developers?
- ## How many users?
  - Depends on what you call a 'user' !
  - Certainly many millions
- ## What types of products?
  - Not just for servers and desktops
  - Huge presence in embedded market

FOSS Community

- Developer community
  - Each FOSS project develops its own sub-culture
  - Most have common elements
- Some common factors
  - Strong leaning towards meritocracy
  - Right to fork, but reluctance to fork
  - Technical focus
  - Openness in communication

First Lab - a2ps

- Download, compile, install
  - Look carefully at the project while working with it
  - Who wrote it? Who supports it?
  - How do the docs differ from a proprietary app?
  - How would you submit a bug report?
  - How would you get help?
  - How many people use a2ps?
  - How active is development?
- Lab docs
  - make sure you read the lab work docs!
  - especially look at the 'build tips' page