



Open Source Assignment 1*

Summary

When you enrolled in this class, you were given an account on the network of computers in the Computer Science Department of Hunter College. This account entitles you to use the computers in the lab, either by being physically in the lab or by connecting to them remotely from outside of the lab, in the comfort of your home for example. The computers that you can use run an operating system known as *Ubuntu Linux*. “Ubuntu” is

“an ancient African word meaning ‘humanity to others’. It also means ‘I am what I am because of who we all are’. The Ubuntu operating system brings the spirit of Ubuntu to the world of computers.”¹

The Ubuntu Linux operating system is an example of a free and open source operating system. The objective of this assignment is to get you to understand what “free and open source” actually means and what larger implications it has. By successfully completing this exercise you will be able to explain to others the differences between free and open source software such as Ubuntu, and proprietary and closed software such as Microsoft Office®. You will also learn how one can be a part of a community that collaborates to develop and maintain such free and open source software.

Because the phrase “free and open source software” is a mouthful, like so many other things, it is known by an acronym: *FOSS* (sounds like “floss” without the “l”.) Some FOSS projects have a humanitarian aspect to them, in the sense that their purpose is to make the lives of people better in some humanitarian way. For example, *Sahana Eden* (<http://eden.sahanafoundation.org/>) is a flexible open source humanitarian platform with a rich feature set designed to provide effective solutions for critical humanitarian needs management, either prior to, or during, a crisis. Such projects are called *HFOSS* projects (pronounced Aych-foss.) There are many such projects in development around the world.

The primary activity in this assignment is the reading of selected short articles and the answering of questions based on those readings.

Instructions

Readings

1. Read the Ubuntu story: <http://www.ubuntu.com/about/about-ubuntu>.
2. Read about the Ubuntu philosophy: <http://www.ubuntu.com/about/about-ubuntu/our-philosophy>
3. Read the Free Software Foundation’s synopsis of free software: <http://goo.gl/gGWX0W>

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¹<http://www.ubuntu.com/about/about-ubuntu>.



Questions

Your answers should show that

- you read the articles,
- you understood the articles, and
- the articles might have spurred your own thoughts.

A good answer to the open ended questions is a short but complete one. You will have to follow certain links in one or more of the above articles to answer some of these questions. If you think there is more than one correct choice for the multiple choice questions, circle all that you think are correct, but circling an incorrect choice gives you a zero for that question.

1. What was the name of the very first version of Ubuntu?
 2. What made Ubuntu different from the commercial versions of Linux that existed before it?
 3. State three different tasks that a person can perform to contribute to the Ubuntu community.
 4. Who started the free software movement?
 5. Login to any of the computer science lab computers. Watch carefully after you login. What version of Ubuntu is running on the machine? Look up the version using Wikipedia and try to find the name given to this release of Ubuntu. What is its name?
 6. Which of the following is the meaning of "free" in the context of free software?
 - (a) The software will cost nothing to obtain.
 - (b) The software can do as it pleases to a users system, accessing and changing all available data.
 - (c) The users have the freedom to run, copy, distribute, study, change and improve the software.
 - (d) The source code is free to those who have purchased the software.
 7. Which of the following is *NOT* an essential freedom according to the Free Software Foundation's definition of Free Software?
 - (a) The freedom to run the program.
 - (b) The freedom to see and study the program.
 - (c) The freedom to share copies.
 - (d) The freedom to own the program.
 - (e) The freedom to share modified versions to others.
 8. Which of these is *NOT* a core principle of open source software, based on the Open-Source Initiative's definitions?
 - (a) The program must include source code.
 - (b) The license must allow people to experiment with and redistribute modifications.
 - (c) The license must not allow a user to sell modified versions of the software.
 - (d) Users have a right to know who is responsible for the software they are using.
 - (e) The license must not restrict anyone from making use of the program in a specific field.
 - (f) The license must not be specific to a product.
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Grading Rubric

This homework is graded on a 0-3 scale (0 = no submission; 1 = homework submitted, but mostly incorrect or with very little effort; 2 = homework submitted, and mostly correct for the multiple choice questions, but not much thought; 3 = homework submitted, correct, and nice effort).

Submitting the Homework

This assignment is due by the end of the day (i.e. 11:59PM, EST) on October 30, 2017. There is a directory in the CSci Department network whose full path name is `/data/biocs/b/student.accounts/cs132/hwks/hwk1`. You must submit either

- a plain text file, or
- a PDF obtained by exporting a document from a word processor.

Do not submit a PDF that is just an image of a document, obtained by scanning or taking a photo. It will not be accepted. ***Your submission must have both the questions and your answers.***

You are submit your homework by running the `submithwk` command that I have written for this purpose, following the instructions below exactly! Do not deviate from these instructions.

To be precise:

1. If you have created the homework document on your own computer, upload it to our server first. After you upload it, rename it `hwk1_username`, where `username` is your username on our system.
2. Login using `ssh` to `eniac.cs.hunter.cuny.edu` with your valid username and password, and then `ssh` into any `cs1ab` host.
3. Navigate to the directory where you put the assignment.
4. Run the command

```
/data/biocs/b/student.accounts/cs132/bin/submithwk 1 hwk1_username
```

Do exactly this, with your actual username in place of the placeholder `username`. The command will create a copy of the file `hwk1_username` in the directory

```
/data/biocs/b/student.accounts/cs132/hwks/hwk1
```

It will be named `hwk1_username`, where `username` is your username on the network. You will not be able to read this file, nor will anyone else except for me. If you decide to make any changes and resubmit, just run the command again and it will replace the old file with the new one. I will be able to determine if it is a plain text file or a PDF file Do not try to put your file into this directory in any other way - you will be unable to do this.