



Assignment 2: About Software Licenses and Open Source Software

Summary

Although the issue of software licenses is not an explicit part of the curriculum of this course, it is implicitly something that you must understand. As a programmer, whether a student or a professional, sooner or later you might be tempted to “borrow” code that someone else has written. On the flip side of this, you might even decide that code that you have written is good enough that you are willing to make it available to other people. Both of these prospects raise some questions:

- What are the rules that pertain to the sharing of code?
- Can you rightfully copy someones code and use it in your program?
- What protection would you have if you made your code available on-line?

The purpose of this exercise is to teach you a bit about software licenses and to get you to answer these types of questions. This is a self-guided tour of this topic. It is a field trip of sorts to the world of software licenses. The primary activities in this assignment are reading of selected short articles and answering of questions based on those readings.

Instructions

Readings

1. Read at least the following two sections on the Open Source Initiative’s Frequently Asked Questions page (<https://opensource.org/faq>):
 - (a) Basics of Open Source
 - (b) Distributing and Using Open Source Software
2. Read this section of the Wikipedia article about software licenses and the included table: <https://goo.gl/Xdbq8y>
3. Read about the different types of licenses available on the Creative Commons website: <https://goo.gl/5R2gND>

Questions

Your answers must be written in your own words. They should be more than just copies of text you found on-line, with a few words changed. They should show that

- you read the articles,
- you understood the articles, and
- you have given some thought to the articles.



A good answer to an open-ended question 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 below, circle all that you think are correct, but bear in mind that circling an incorrect choice gives you a zero for that question.

1. (16%) Explain what a “copyleft” software license is and give an example of an actual copyleft license in use today.
2. (12%) Exactly what restrictions or lack of restrictions make a *permissive* license different from a *copyleft* license?
3. (12%) The Berne Convention of 1886 is an international agreement that most nations signed, which gives creators of works an automatic copyright, so that they do not need to officially register their work to receive copyright protection. When someone writes software and does not put an explicit license on it, that person has an exclusive copyright on it and the work is protected according to that Convention. Which, if any, of the activities below can someone other than the creator of a work do with that work if the work was not given an explicit license:
 - (a) the right to translate the work to another language
 - (b) the right to make adaptations and modifications of the work
 - (c) the right to perform or recite the work in public if it is a performance work
 - (d) the right to advertise to the public the performance of such works,
 - (e) the right to put the work on-line
 - (f) the right to make copies of the work for ones private use
4. (20%) What is public domain software? Be specific and do not use the term “public domain” in the definition. How is public domain software different from software issued with a free (and open-source) software license?
5. (20%) What are the four different conditions that an author might want to apply to their work using a Creative Commons license, and what are the resulting six different types of licenses? Briefly summarize what each license type grants or excludes.
6. (10%) Look at the license on this assignment. What are all of the rights I have granted to you to do with it?
7. (10%) If you download open source software that you found on-line, whether or not it has an explicit license, what must you do to use it in your code legally? Be specific: can you use it for your own purposes, and/or modify it, and/or distribute it, sell it, etc., and if so, what specific steps must you take?

Grading Rubric

This homework is graded on a 100-point scale based on the above weights.

Submitting the Homework

This assignment is due by the end of the day (i.e. 11:59PM, EST) on February 15, 2018. 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 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.**

There is a directory in the CSci Department network whose full path name is

```
/data/biocs/b/student.accounts/cs335_sw/assignments/assignment2.
```

You are submit your homework by running the `submit_cs335_assignment` command, following the exact instructions below. 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, using either `sftp` or `scp` (on Mac systems in the terminal window or on Linux systems in a terminal window), or in Windows using the PuTTY file transfer agent called `psftp` or `pscp`. If you have never used any of these, read the documentation that comes with it (such as man pages in Linux or the Mac.) After you upload it, if it is a PDF document, give it a name with a `.pdf` extension. Otherwise you do not have to name it anything in particular. What you name the file does not really matter, but it makes it a bit easier if it has that extension.
2. Login using `ssh` to `eniac.cs.hunter.cuny.edu` with your valid username and password, **and then ssh into any cslab host.**
3. Navigate to the directory into which you uploaded the assignment.
4. Suppose you file is named `assignment2`. Then run the command

```
submit_cs335_assignment 2 assignment2
```

Do exactly this. The command will create a copy of the file `assignment2` in the directory

```
/data/biocs/b/student.accounts/cs335_sw/assignments/assignment2
```

It will be named `assignment2_username`, where `username` is your username on the network, or if it has an extension such as `.pdf`, it will be named `assignment2_username.pdf`. 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 even without the extension (with the Linux `file` command.) Do not try to put your file into this directory in any other way - you will be unable to do this.