Lab Exercise 9 – Computer Ethics: Intellectual Property Rights and Privacy
Computer Science 2334
Due by the end of your assigned lab period (Thursday, April 24, 2014)

Your Name: _____

~~Group Members:~~   This exercise is to be completed individually.

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Objectives:

1. To be able to analyze ethical situations.

2. To be able to make ethical judgments based on intellectual property concepts, the consequences of different approaches to intellectual property, and existing legal instruments that protect intellectual property.

3. To be able to make ethical judgments based on privacy issues, the consequences of different approaches to privacy, and laws regarding privacy.

4. To demonstrate your understanding of intellectual property, privacy, and computer ethics through the analysis of case studies.

Instructions:

Read the case studies included in this lab exercise. Develop and write a response of a few sentences for each case study that addresses the exercise posed at the end of the case study scenario.

You should consider the principles of a professional organization relevant to CS when answering these questions. As discussed in class, it is your responsibility to locate a code of ethics from a relevant professional organization to use in the completion of this lab.

Use only the space provided for each scenario for your response.

You should spend approximately 15-20 minutes per scenario.

Once you have completed the exercises in this document, you will submit this lab exercise handout for grading.

At the end of lab, the entire class will discuss these scenarios and the various responses developed by the students.

The cases in this lab exercise were dreamed up by Prof. Hougen. Any similarities to any persons, living or dead, are purely coincidental.

Scenario 1. (Hypothetical)

Cliff is fresh out of college and excited about his first software development job – writing smart-phone apps for Ananam Software. Ananam is preparing a new social app called "ShareItIn" that will help friends stay connected all day long. In particular, his job is to write the part of the app that allows users to find nearby bars and parties using a database populated by local businesses that pay to be listed and ShareItIn users who simply want to connect with their friends.

One day, working alongside his more experienced partner Patricia, she asks him why his code is making a call to the OS to turn off location services. Cliff is a bit puzzled. He knows that keeping location services running all the time will drain the battery faster than turning it off between uses, unless it needs to be used frequently. "Uh, to save the battery?"

Patricia rolls her eyes. "But then we just have to turn it on again. It is on all the time, of course."

"Uh, of course?"

"Yes, of course. Haven't you looked at the startup code?"

"No, um, not closely."

"Well, look. It starts up location services first thing. I think it keeps a log file which maybe gets uploaded to our servers or something like that."

"Oh. Why?"

"I don't really know. My guess is that the businesses model isn't to sell a bit of access to a few local businesses. I think it is to collect detailed customer profiles that can be sold along with contact information to major companies. I heard that Gene's group mines user chats."

"Oh." Cliff removes that line of code and goes back to writing code to find bars. He feels like he could use a drink about now but he has a long day ahead of him so he concentrates on his work.

At the end of the day, Cliff passes his supervisor Donna in the hall. She asks him how his day went.

"Fine," Cliff tells her. "Good, I mean. Couldn't be better."

Exercises.

Find at least *two* distinct ethical principles from a professional code of ethics that are relevant to this scenario. List each principle, **give its source**, and *explain* why you think it is relevant.

For each principle, say whether you think Cliff abided by (that is, followed) the principle you listed and *explain* how you came to that conclusion.

Give at least one likely motivation for Cliff's actions and *explain* how you concluded that was a likely motivation.

Give at least one entity (person or group of people) who would be likely to benefit from Cliff's actions and *explain* how you concluded that entity would be likely to benefit.

Give at least one entity (person or group of people) who would be likely to be harmed by Cliff's actions and *explain* how you concluded that entity would be likely to be harmed.

List at least *two* ethical-decision-making problems, each of which is likely to have contributed to at least one of Cliff's decisions and *explain* how you concluded that each was a likely problem.

List *two* ethical-decision-making strategies that Cliff could employ to improve his ethical decision making and *explain* how he might employ those strategies in this situation.

Response:

Scenario 2. (Hypothetical)

Reimi is also excited about her new job, although she isn't straight out of college. Instead, she worked until just last week for Aiiafy, a large and very successful software company, on ASE, the Aiiafy Search Engine, which is one of the Internet's most successful search engines. It was four great years – she learned a lot and had a fun time. However, she thinks the businesses model of HowIE.com, her new employer, will make it wildly successful and, since it is a startup and she was able to negotiate an ownership share for herself as part of her hiring package, she is convinced she'll end up much better off financially than if she had stayed with her previous employer.

HowIE.com is a content farm. However, unlike other content farms which pay people small amounts of money to write simple "how to" articles on various topics that are popularly searched (then post those articles alongside targeted ads as a revenue stream), HowIE uses software to generate its "how to" articles. HowIE calls this software "PairOPhrase" and HowIE's approach is proposed to work as follows:

1. Each night HowIE's "PairOPhrase Trender" will use search frequency data that are publicly available from Aiiafy to determine popular search topics amenable to how-to articles.

2. Once a suitable topic is found, a simple script will use ASE to determine a good existing how-to article on that topic.

3. That article will be imported into HowIE's "PairOPhraser," which will paraphrase it.

4. The original article and the "PairOPhrased" article will be run through plagiarism detection software to ensure that it the derived article is suitably different from its source article that it will appear that the new article is an independent work.

5. The "PairOPhrased" article is then posted on HowIE.com along with ads for products related to the article's topic.

6. ???

7. Profit!

Step 6 is where Reimi comes in. It is her job, with her knowledge of ASE's page ranking algorithm, to ensure that the HowIE article shows up at or near the top of the ASE results when relevant search terms are entered by ASE users.

Exercises.

Find at least *two* distinct ethical principles from a professional code of ethics that are relevant to this scenario. List each principle, **give its source**, and *explain* why you think it is relevant.

For each principle, say whether you think Reimi abided by (that is, followed) the principle you listed and *explain* how you came to that conclusion.

Give at least one likely motivation for Reimi's actions and *explain* how you concluded that was a likely motivation.

Give at least one entity (person or group of people) who would be likely to benefit from Reimi's actions and *explain* how you concluded that entity would be likely to benefit.

Give at least one entity (person or group of people) who would be likely to be harmed by Reimi's actions and *explain* how you concluded that entity would be likely to be harmed.

List at least *two* ethical-decision-making problems, each of which is likely to have contributed to at least one of Reimi's decisions and *explain* how you concluded that each was a likely problem.

List *two* ethical-decision-making strategies that Reimi could employ to improve her ethical decision making and *explain* how she might employ those strategies in this situation.

Response: