~Chapter 1~

• Give two examples of how a social pressure or need led to the development of a new information technology.

1.) Communication needs to be quicker and more reliable so the Telegraph was born. Then the telephone.

2.) The printing press was created to allow people to mass produce the newspaper.

Give two examples of how the adoption of a new information technology changed society.

1.) The Horseback courier lost their jobs with the invention of the telegraph.

2.) The Cash register reduced stealing by introducing a receipt system as well as security measures.

• Compare and contrast the social impact of these three information technologies: the telegraph, the telephone, and wireless networks

The telegraph brought on new possibilities of communication that was not possible before its time. It allowed for immediate communication around the country. It allowed communication during war times as well. The telephone was then created as a result of the success from the telegraph and made it easier for people to communicate with voice rather than Morse code. Wireless networks are the greatest form of communication as it for one does not need wires and two can allow more than just communication as we can send data over the network. Data such as movies, games, music, voice, text, etc…

• Explain what is meant by ‘decentralized’ and why the Internet has a decentralized structure and the benefits and drawbacks of this structure.

There is no center hub for all communications to go through in the internet. Every computer connects to these hubs and your computer will connect and bounce its data through multiple hubs before reaching its destination. This is especially good because you can lose a hub (due to power outage or failure) and still be able to reach your destination by connecting to another hub. Internet = web.

• What was the motivation for the creation of higher-level programming languages and how did their introduction change computing?

The motivation was to make programming easier for the average programmer and easier to teach to novices wanting to learn. They created these higher level languages to also make programming less error prone and faster with better algorithms. These languages could also do what the lower level languages could do with less lines of code meaning less errors and less time to compile/type. The more they continued to improve these languages the more possibilities there were to fix specific problems.

~Chapter 2~

• What is ‘moral luck’? Create your own example that demonstrates the problem of ‘moral luck’. (cannot be one given in the textbook)

Moral Luck is the problem with Act Utilitarianism such that you are responsible for any unforeseen consequences that arise from your action. Like if you were to show your girlfriend a really funny video you enjoyed and her watching the video has her go into epileptic shock from the flashing imagery.

• Pick two of the following moral frameworks that were rejected and discuss the case for and against each one.

o cultural relativism: FOR –

Against – Just because tow societies do have different views about right and wrong doesn’t imply that they ought to have different views. (if one society collects rain water for water and another sacrifices to rain god for water. We cannot speak out against either because no person in one society can make any statements about the morality of another society.)

~~o ethical egoism~~

o divine command: FOR – God is all-good and all-knowing. We owe obedience to our creator.

Against – There are many holy books, and some of their teachings disagree with another.

• What is plagiarism? Describe four different ways that a person can commit plagiarism (See appendix A)

Deliberately:

* Copying the words of another without both putting the copied text in quotations and citing the source
* Paraphrase the words of another without citing the source
* Incorporate the figures or drawings of another person without citing the source
* Include facts that are not common knowledge without citing the source
* Use another person’s ideas or theories without giving that person credit.

• Explain the difference principle and in what ethical framework it plays a part.

Social Contract Theory: social and economic inequalities must be justified. The only way to justify a social or economic inequality is to show that its overall effect is to provide the most benefit to the least advantaged.

• Thomas Hobbes argued that everyone living in a civilized society has implicitly agreed to two things. What are those two things?

(1) the establishment of such a set of moral rules to govern relations among citizens

(2) a government capable of enforcing these rules.

• Define each of the following and give an example of each.

o negative right: A right that another can guarantee by leaving you alone to exercise your right.

Ex. The right of free expression.

o positive right: A right that obligates others to do something on your behalf.

Ex. The right to free education from k-12. In order for this to be possible everyone else must pay taxes so you may attend school.

o absolute right: A right that is guaranteed without exception.

Ex. The right to life.

o limited right: A right that may be restricted based on the circumstances. Typically, Positive rights.

Ex. Free school until 12th but after you must pay for college.

Chapter 3

• Why is freedom of expression not an absolute right? Give at least two practical examples to illustrate your argument.

Freedom of expression is a limited right because there are those who abuse it to hurt others. Those actions do not serve the ends of the First Amendment. Restrictions on our Freedom of Expression are for the greater public good such as…

(1) The prohibition of cigarette advertising on television. The public should not be enticed by advertising to want to smoke cigarettes as smoking has detrimental effects on public health.

(2) Adult bookstores are zoned out in some cities as their presence lowers property values.

• According to the U.S. Supreme Court, why do radio and television broadcasters have the most limited First Amendment rights?

Radio and Television are broadcasted to anyone with a receiver and because of that they cannot restrict children from accessing these broadcasts. Even if they mention at the start of the broadcast that it is not suitable for children they cant prevent kids from joining in the middle of the broadcast.

• What characteristics of the Internet make censorship of the Internet particularly difficult?

You cannot restrict access to sites without a separate program installed on the computer. Websites with age restrictions can be easily passed with false information. Also you cannot delete anything from the internet as someone somewhere has a copy of said information and can reupload it at any point in time.

• Explain how Mill’s Principle of Harm relates to the moral issue of pornography on the Web.

The government should not get involved in the private activities of individuals, even if the individuals are doing something to harm themselves. Some people think pornography hurts the consumer watching them but it does not harm anyone else. Using the Principle of Harm the government should not intervene.

• How has sexting by teens created new legal challenges for US states? Give a real example.

US state laws only include the age of the person in the photos and not the age of the person taking the photos and releasing them or viewing them. So if a 16 y/o kid takes a nude selfie and sends it to their boyfriend who is also 16 they both are sending underage pornographic images and are subject to harsh punishments such as being labeled a pedophile and registering as a sex offender.

REAL EXAMPLE: Ohio High School student Jesse Logan hanged herself after sending a nude photo to her BF. They broke up later and he sent the photo to everyone in school. She then skipped classes and then hanged herself.

• Give two examples of high tech methods of identity theft and two examples of low-tech methods of identity theft.

HighTech:

(1) Credit card skimmers – either from an ATM/cash register/waiter

Spyware – software installed on a computer that records keyboard input.

(2) Phishing – Making an email look official enough for you to type in your login information.

LowTech:

(1) Dumpster Diving – looking for personal info in garbage.

(2) Shoulder Surfing – though retarded name, just means they looked at your password

• Internet Addiction:

o What is it?

o Provide at least 3 different examples where it may be harmful

o How may it affect very young children

Chapter 4

• List and discuss the 4 criteria used by the courts in copyright cases to help determine whether or not ‘fair play’ should be used in the judgment of a copyright lawsuit.

(1) What is the purpose and character of the use?

The purposes of criticism, commentary, news reporting, teaching scholarship, and research are more likely to be permissible than a commercial purpose.

(2) What is the nature of the work being copied?

Use of nonfiction is more likely to be permissible than use of fiction. Published works are preferred over unpublished works.

(3) How much of the copyrighted work is being used?

Brief excerpts are more likely to be permissible than entire chapters.

(4) How will this use affect the market for the copyrighted work?

Use of Out-of-Print material is more likely to be permissible than use of a readily available work.

• People give a variety of reasons for copying a music CD from a friend instead of buying the CD. Select two of the reasons below and refute each one using one of the ethical theories the book has proclaimed as viable. Do not use the same ethical theory for both reasons.

o I don’t have enough money to buy it.

o The retail price is high. Consumers are being gouged.

o Since I would not have bought it anyway the company did not lose a sale.

Kantian believes stealing is wrong no matter the excuse.

o This is insignificant compared to the billions of dollars’ worth of music being exchanged over the Internet.

o Everyone else is doing it. Why should I be the only one to pay for it when everyone else is getting it free.

Rule Utilitarianism says for this to be a rule everyone must follow this rule. If everyone must follow this rule then the company producing the CD or the Artists creating the music do not get funded for the effort they put into making the music. If no artists are getting funded for their work then the incentive is lost. We lose music as an entertainment because of this rule.

o I’m giving my friend an opportunity to do a good deed.

• What is the Creative Commons license? Discuss the philosophy behind it and the criteria used to generate a license.

It’s a very simple easy to use website that allows you to commercialize or not commercialize your work by answering some simple questions like:

* Allow commercial uses of your work? (Y/N)
* Alllow modifications of your work? (Y/Yes as long as others share alike/N)

After Answering these two questions the website generates a simple easy to understand and read license you can link along with your work.

The philosophy behind it was to make it easy for people to specify how they want to be credited in their work or how they want others to use or not use their work. It also was created so that people may increase their exposure online as Google and other search engines use this license to categorize content people may be searching for.

• What are the ways that an individual or firm may protect intellectual property in the United States? Briefly describe the uses for each kind of intellectual property protection.

* Trade Secrets: Like Coca-Cola does for their secret formula. (formulas, ingredients, algorithms, code, etc…)
* Copyrights: Gives the creator 5 basic rights:
  + The right to reproduce the copyrighted work.
  + The right to distribute copies of the work to the public.
  + The right to display copies of the work in public.
  + The right to perform the work in public.
  + The right to produce new works derived from the copyrighted work.
* Trademarks and Service Marks: Brand names and icons along with services like UPS. Prevents people from using their logo or name without permission.
* Patents: Similar to trade secrets except public and detailed out with the invention. Once it expires it’s up for grabs.

• Explain ‘copyright creep’.

Since the first copyright act was passed in 1790, both the length of copyright protection and the kinds of intellectual property that can be copyrighted have grown.

• What is a peer-to-peer network? Give two real examples of how this type of network contributed to copyright infringement.

Peer to peer networks allow users to share digital software like music, movies, games, programs by small chunks. When downloading from PTP you connect to 10’s/100’s/1000’s of computers at one time receiving small bits/chunks of bits from each computer rather than downloading from 1 source like a server. MUCH FASTER!

* People would use services like Napster (PTP) to download popular music.
* The Pirate Bay was another service that performed like a search engine for Pirated software. Because the site is on a PTP network they basically cannot be taken down and police are in a cat and mouse game.

• Explain the process for a ‘clean room’ software development strategy.

You give your programmers or developers a room where they cannot derive any ideas from other works but can only create what is in their heads. They can use competitors software but only what is visually available and not the code underneath. They use this tactic to generate original ideas and stray away from infringing on any copyrighted material.

• List 4 key characteristics of the license for an ‘open source’ program.

* There are no restrictions preventing others from selling or giving away the software.
* The source code to the program must be included in the distribution or easily available by other means (such as downloadable from the internet)
* There are no restrictions preventing people from modifying the source code, and derived works can be distributed according to the same license terms as the original program.
* There are no restrictions regarding how people can use the software.