

Computer Ethics

Many see computer ethics as a grey area. Some people justify wrong actions for what they shouldn't be doing. Most just don't understand the rules and why the rules were made in the first place. Society has rules about our behavior.

"Do unto others as you would have them do unto you."

-The Golden Rule

Ethics is more than just the "**Golden Rule**". It is a principle of what is right and wrong.

Everybody knows it is wrong to lie, cheat, steal, etc... However, some people don't know you are not supposed to **copy** a game you purchase and then give it to your sister so she can use it on her computer. In this article, we will try and explain different situations that clearly show right from wrong associated with computer technology.

Part of the problem is technology has outpaced society's ability to clearly label right from wrong. While many issues really only require someone to apply their common sense, some issues require deeper thought and analysis before determining right from wrong. It is our responsibility to give thought to the **wise** and **responsible** use of technology.

Lets look at some different ethical situations handled wrongly that can and do cause harm to others. If a person enters your locker late at night and **steals** your property and the next day at school you see private pictures or notes on display at your school, you probably will feel violated and very hurt. This is no different than someone entering your files and looking at your work or reading your email.

Some people copy software and then give out their copy for others to use. Programmers and software creators lose millions of potential sales each year due to this simple crime. Some programmers work for years perfecting a program. Money lost due to sales not made only increases the cost of those programs actually sold.

There are other crimes with more dangerous consequences. People who are extremely bright with computers sometimes use their abilities for evil. They create programs we call viruses to take control of our computers in some way. Sometimes these programs actually destroy the contents of our computer.

So what do you think, is it right to read someone else's private electronic property? Is it right to buy a game then give it to friends so they won't have to pay for it as you did? Is it right to use your knowledge to create "virus" software? If your answer is no, then good for you. You are on the road to making ethical decisions about technology.

What can you do about all of this? First, act on what you believe. "Do unto others as you would have them do unto you". You wouldn't want others to read your private mail so don't read their private mail. You wouldn't want to work hard at something and then not get paid, so don't steal other's hard work.

If you think it's funny or smart to be a **hacker** - people who use their skills to break into other people's private computer - think about how it would feel to have a hacker look into your computer files. If you think it would be fun to create a program that destroys parts or all of someone else's computer then imagine how it would be to try and put back together your computer after a **virus** infected it.

It is a simple question of right and wrong! With the knowledge and ability to use a computer comes responsibility. The skills you are learning will one day provide advantages over someone who doesn't know as much. However remember that your choices of right and wrong affect more people than just yourself. It is up to you to use computers in a way that doesn't harm others.

Questions Part 1

Directions: Answer each of the questions in complete sentences.

1. What is the Golden Rule?
2. Make a **TOP 5** list of rules to follow in the area of computer technology.
3. Define **virus** and **hacker**.
4. In what ways does making an illegal copy of software and giving it to another, affect the people that make and sell them?
5. There are three things someone can steal from you: **time**, **property**, and **reputation**. Give an example of a way that each of the three could be stolen electronically.
6. What **advice** would you give someone who wants to know how to balance the privilege and the responsibility of having a computer.

Software (Is it really yours?)

If you purchased a radio, clothes or just about any other thing at a store, you own that property. However with software it is not that simple. Software is entirely different. Software is more than just a shiny DVD or CD. It is a person's or most likely a team of people's ideas. It is their creative thoughts put down in a complex computer language. In fact you probably have never read all that fine print that comes with the software. This fine print is the license agreement that controls your use of the software and once you open and use the software you are agreeing to the license agreement.

In reality all you really own when you purchase software is the plastic seal wrap, box, manual (if it comes with one), and DVD or CD. However you do not own the instructions sealed on the DVD or CD. You are only being given a license to use the software. The game maker owns the *copyright* on the software. That is the reason for the © (copyright) symbol.

Just because you paid \$59.99 at the store does not give you rights to do anything with the software you want. It is sort of like purchasing a book at a bookstore. The paper that you purchased is all yours to write on and highlight. However when you copy what the author said in a paper you are writing then you have violated copyright © laws binding an author's thoughts and ideas. You could face criminal charges or perhaps more likely a failing grade on your paper for plagiarizing (stealing) from another author. Many students think that taking ideas straight from an encyclopedia is okay. Little do they realize this is stealing and can be dealt with very seriously.

Software copyright© is very similar to book copyright©. The ideas of a person's program is protected from someone reselling or making copies. The fines for selling software is worse than a failing grade in school. You could be imprisoned, fined up to \$10,000 in criminal charges, and up to \$50,000 in civil penalties for **each** copy you give away or sell.

There is an exception for making copies. You are allowed to make copies for backup purposes. This is referred to as a *fair use* provision. The provision however states that the backup copy is for your personal use only. That copy may not be given to a friend or someone else.

There are four types of software. Commercial is the most common. It allows software stores to sell a copy of software with manuals and other documentation. The second is called shareware. Shareware is unique because there is no upfront charge. The people supplying the software give it away free for a trial period. However after the trial period, the user of shareware is trusted to either pay a fee for the software or erase it off their computers. The third type of software is called freeware and it is given away freely without any trial period. It is just free for the taking. However it is copyrighted. You may not resell it as your own later. The fourth type of software is called public-domain software. It is also free however it is not copy protected. It is rare and usually not very sophisticated.

There are **three** common software licenses. The first is called single-user and allows only one user of the software. The purchase of most software falls under this license agreement. The second is called site-license; and it allows the owner to put as many copies as he/she wishes as long as the copies remain on a given campus or location. The third type of license is called network-license and it allow a copy of software to be placed on a file server-- a computer sharing resources with at least one or more other computers. There are numerous benefits of each type of license. Many companies will grant special licenses based on company needs.

To help software publishers, a serial number and/or password is sometimes used to block illegal copying of software. Serial numbers keep track of exactly how many copies are running on a network. Passwords block someone who does not have a manual to get into the software. Another type of deterrent is copy protection code. This code requires a disk of CD to be in the drive anytime the software accessed.

Questions Part 2

1. What is **one** thing that would show you that a piece of software has a copyright?
2. Do you "**own**" the software that you buy? Explain your answer.
3. If you were a judge and someone was found guilty of duplicating a company's software program and selling it as their own, what sentence would you give the guilty person?
4. How is making a backup copy of a game and giving it to a friend similar to copying a story word for word and turning it in for your English assignment?
5. When you **open** and **use** a software package, what are you agreeing to?
6. What is the fair use provision?
7. Name **3** ways to protect software from being copied.
8. What is the difference between shareware, freeware, and public-domain software.
9. What is one advantage of purchasing a **site-license** over purchasing 30 **individual** copies.
10. If you were a computer software programmer, what software product would you make? Describe why?