**Integrity Commitment**

I have adhered to the Clemson's Academic Integrity statement as referenced below and, as instructed for this quiz, I did not collaborate with anyone prior to, or during this quiz regarding the content or answers of this test.

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Sign here \_\_\_\_\_\_Patrick Woodrum\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3 points for each question**

1. What are the 4 significant Eras since the development of the computer and what distinguished one from the other?

**Pioneering Era: Invention of the computer. Massive in sizes and low functionality**

**Stabilizing Era: More uses for computers, higher functionality with the addition of displays and a condensed structure**

**Micro Era: In-home computers begin showing up. Now with screens, microchips for processing, and direct input as well as internet capability**

**Cloud Era: Most everything exists on the internet. Devices have extreme processing power alongside tiny hardware. Computers can now fit in your pocket and communicate and send/receive data from anywhere in the world through the internet**

1. What is Moore’s Law?

**Moore’s Law states that the computing power of new microprocessors doubles every 18 to 24 months.**

1. Define Ethics

**Ethics is the study of what it means to “do the right thing”.**

1. Define Utilitarianism, Natural Rights, Negative and Positive Rights

**Utilitarianism: ethical view asking “what is the overall utility of an act?”**

**Natural Rights: ethical view stating the right to life, liberty, and property**

**Negative Rights: the right to act without interference**

**Positive Rights: an obligation of some people to provide certain things for others**

1. Summarize the Fourth Amendment

**The 4th Amendment requires that the government provide probable cause to search homes and businesses and also limits the government’s rights to do so**

1. How has digitization and technological advances impacted the Fourth Amendment?

**Previously, personal information was available in physical forms inside homes or businesses and therefore a warrant to search homes usually resulted in physically being present and searching the building. Now that all information is online, the government can search through our information without entering homes and without giving notice that they are doing so by using the internet.**

1. Define the following terms: Informed Consent, Secondary Use, Computer Profiling, and Data Matching

**Informed Consent: users being aware of what info is collected and how it is used**

**Secondary Use: Use of personal info for a purpose other than the purpose for which it was provided**

**Computer Profiling: analyzing data to determine characteristics of people most likely to engage in certain behavior**

**Data Matching: Searching masses of data for patterns and information and then comparing them to match records**

1. What is the definition of Intellectual Property?

**Intellectual Property is the intangible creative work of a person that comes from creativity, ideas, research, skills, labor, etc. that is protected by copyright and patent law.**

1. What are the rights of a Copyright holder?

**To make copies, to produce derivative works, to distribute copies, to perform the work in public, to display the work in public**

1. Why is it so difficult to ensure against Copyright infringement today?

**The internet and technology have made it exponentially easier to find materials, compress large files, and transfer files. The smaller sizes of devices and ease of access between devices has made it easier to illegally reproduce copyright materials, modify them graphically, and then distribute them.**

1. Define the Fair Use Doctrine

**The Fair Use Doctrine specifies how a person can fairly use a document they did not create through four factors: purpose and nature of the use, nature of the copyrighted work, amount and significance of portion used, and effect of use on potential market**

1. What are some methods to protect IP?

**Implement software responses such as expiration dates, activation codes, or court orders. Ban technology via lawsuits, requiring that new technology include copyright protections. Use Digital Rights Management including encryption and producer flexibility.**

1. Is free software good or bad?

**Free software can be both good and bad. Free software can mean everything is open source and has spawned immensely useful and popular programs like GNU that has allowed thousands of other software packages that are also open source and viewable to the public. It can be bad when people accumulate patents but don’t create products with them, and then license the patents off to others to collect a profit.**

1. What is hacking? Is there good and bad hacking?

**Hacking is intentional, unauthorized access to computer systems. Hacking can be both good and bad. Hacking can be used to intentionally test a system for bugs in order to provide better privacy. It can be used for flaw testing and finding vulnerabilities in a system that may have security issues. Hacking can also be bad when it is used to infiltrate a system for sensitive information or destructive purposes on a system that the hacker does not own or care about.**

1. What are some security methods to prevent hacking?

**Preventing cross-site scripting or sequel injection can help prevent hacking. You can also install firewalls and antivirus software to help your computer recognize hacks or viruses**

1. Define Identify Theft

**Various crimes in which criminals use the identity of an unknowing, innocent person**

1. What are three ways that bad actors can get someone’s identity?

**People can access your identity and steal it through phishing websites, phony gas pump readers, malicious links in a text (smishing) or email, false job offers asking for your personal information, and even through a voice connection (vishing).**

1. Name three way to combat identity theft

**Use encrypting to safely store data. Provide an activation method for new card users, don’t print the full card number on receipts, and use biometrics to ensure that someone that isn’t you cannot access your devices or information.**

1. Can you trust information on the Internet?

**Short answer: not always. There is a lot of information on the internet but much of it is incorrect. Search engines rank results by popularity, not correctness. Internet algorithms tend to show users one perspective and social media caters to your interests. Alongside this, there are vulnerable viewers of information that are not as educated or not as experienced that may believe the info, share it, or even edit it falsely.**

1. Why may computer models not be accurate?

**Models are not always accurate because they involve assumptions and simplifications of reality. The creator of the model may not have a full knowledge of what they are modelling, and the data used to create it may be incomplete or incorrect. Also, it is nearly impossible to represent human values as numbers in a model**

1. What is the Digital Divide?

**The Digital Divide is the trend in computer access that grants accessibility of new technologies to only the wealthy. The Divide is the time it takes for new technology to make its way to public access and common use.**

1. What is a Neo-Luddite? Are their perspectives warranted?

**Neo-Luddites are against technology and the implementation of it in our society. They argue that technology is used to eliminate jobs and that technology has made no important improvements in life. All perspectives should be acknowledged and there will always be a group of people to argue against a massive shift in the way we live, so their opinions will always be warranted to them. I say that in a way, yes they are warranted, because technology is scary, technology is a field of the unknown, and it can be terrifying not knowing which direction technology will take the world.**

1. What fears were generated with the rapid adoption of computers?

**People were scared that there would be mass unemployment due to increased efficiency of computers. There was also the fear for the need of increased skills and training that was widening the earning gap.**

1. Identify three benefits and three problems with telecommuting

**Benefits: save time when you would be commuting, work more efficiently at your own pace and timing, reduced environment impact from cars and exhaust**

**Problems: it can be easier to get distracted, you are now dependent on your internet stability and the service you pay for in your internet and hardware, and there is the problem of too much sitting and no moving around.**

1. What is the difference between outsourcing and offshoring?

**Outsourcing is when a company pays for someone else to take on a test or provide a service, offshoring is when a company moves their processes and services to another country or overseas in order to reduce their own costs.**

1. What do corporations use as justifications for monitoring their employees?

**They use training, measuring productivity, checking compliance with the rules, and detecting threatening behavior as justification for monitoring employees. They say they are concerned over security threats or inappropriate behaviors as justification for it as well.**

1. Name at least five reasons that computer systems have so many failures

**Computer systems have failures because of the following: poor testing, rushed production, the unpredictability of users and their inputs, overloaded developers on the scale of the project, and not understanding the requirements of the system.**

1. Identify at least five ways that a computer professional can increase system reliability and safety?

**Stress the importance of good software engineering and professional responsibility, use user interfaces and human factors, check for redundancy and use self-checking, do plenty of testing on the system, and include real world testing with real people for confirmed results.**

1. Why are professional ethics needed?

**Professional ethics are needed to keep the workplace civil and encourage others to follow the code of ethics. Public companies are traded on the stock market so there are limits to the things you can do so that the company keeps its stock value. Alongside this, practicing professional ethics will set an example for everyone around you and show to them that you need to take ownership of problems or mistakes and be constructive within a work environment.**

1. What are at least two items to highlight in your resume to make you more hire-able?

**Showcase your highest education and certifications for the type of job you are applying for. List the relevant skills you possess that could make you stand out as a target. Highlight your specific experience that relates to the job that could give you the edge over someone without that experience.**

1. What is “online presence”?

**Online presence is the collective existence of a company or person that you can find online or through an online search. Your personal websites and social media accounts and your activity on them count as your online presence.**

1. What are three things you can do to get ready for an interview at a company?

**Ask HR or check LinkedIn to see who will be interviewing you, if possible. Research the company to see what they do and what you could potentially be doing in this job. Research the company’s competitors and find information on that. Go to glassdoor.com and scan anonymous reviews of former employees.**

1. Name at least two things you shouldn’t you do in an interview

**Ask about pay, vacation, or benefits. Don’t speak negatively about former bosses or jobs you had. Don’t act desperate or nervous. Don’t chew gun and avoid saying “like” a lot.**