

MICHIGAN STATE

UNIVERSITY

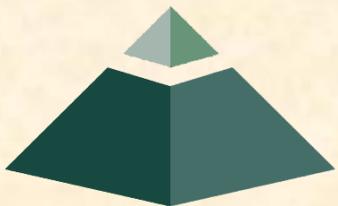
11/28:
Ethics and Professionalism

The Capstone Experience

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Fall 2012



*From Students...
...to Professionals*

Caveat Emptor

- Opinions Expressed
 - My Own
 - Do Not Represent MSU
- Not an Attorney
- No Warranty

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Ethics vs Law

- Ethics
 - “Good” vs “Evil” or “Right” vs “Wrong”
 - Moral Judgment
 - Choice
- Law
 - Legal vs Illegal
 - Legal Judgment
 - No Choice



Professional/Corporate Ethics

- Set by...
 - Professional Society
 - Licensing Agency
 - Government
 - Company
 - Etc...
- Must obey if you want to...
 - ...be a member
 - ...be licensed
 - ...do business
 - ...keep your job
 - ...etc

Really More
Like Law



Lots of Variables

- Who Your...
 - ...Employer Is
 - ...Customers Are
- Very Different Rules/Laws/Policies
 - Industry
 - Privately Held
 - Publically Held
 - Government
 - Government Contractor
 - Educational Institution
 - Etc...



Resources

- University of Virginia

<http://repo-nt.tcc.virginia.edu/ethics/index.htm>

- Texas Tech

<http://www.niee.org/pd.cfm?pt=NIEE>

- ACM

<http://www.acm.org/constitution/code.html>

- IEEE

<http://www.ieee.org/about/corporate/governance/p7-8.html>



- Code of Ethics and Professional Conduct
<http://www.acm.org/constitution/code.html>
 1. General Moral Imperatives
 2. More Specific Professional Responsibilities
 3. Organizational Leadership Imperatives
 4. Compliance with the Code
 5. Acknowledgements



1. General Moral Imperatives

1. Contribute to society and human well-being.
2. Avoid harm to others.
3. Be honest and trustworthy.
4. Be fair and take action not to discriminate.
5. Honor property rights including copyrights and patent.
6. Give proper credit for intellectual property.
7. Respect the privacy of others.
8. Honor confidentiality.



2. More Specific Professional Responsibilities

1. Strive to achieve the highest quality, effectiveness and dignity in both the process and products of professional work.
2. Acquire and maintain professional competence.
3. Know and respect existing laws pertaining to professional work.
4. Accept and provide appropriate professional review.
5. Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks.
6. Honor contracts, agreements, and assigned responsibilities.
7. Improve public understanding of computing and its consequences.
8. Access computing and communication resources only when authorized to do so.



School World vs. Work World

What happens if you break the “rules”?

- School World?
 - Slap on the Wrist
 - Flunk an Assignment or Course
 - Kicked out of School (...but Go to a New School)
 - Etc...
- Work World?
 - Fired
 - Blacklisted
 - Prosecuted
 - Fined
 - Go to Jail
 - Etc...



Ethics / Legal Issues

- Is it...
 - ...ethical
 - ...legal
- ...for...
 - ...University
 - ...Employer
 - ...Government
- ...to monitor...
 - ...email?
 - ...internet usage?
 - ...text messages?
 - ...phone usage?
 - ...twitter?
 - ...Facebook?



Use of Email

- Institutional vs. Personal
- Policies/Legalities
 - May be...
 - Against Company Policy
 - Public Information (FOIA-able)
 - Subpoena-able
 - Etc.
- Etiquette
 - Watch...
 - What You Write
 - How You Write
 - Who You cc and bcc
 - Reply All
 - Etc.



Use of Social Networking

Clean up your web presence.

- Facebook
- Personal Web Pages
- Flickr
- Twitter
- Etc...

HR people will and do check these things out.

What about your 1st Amendment rights?



Use of Hardware/Software

- Institutional vs. Personal
- May Be Specific Policies
 - Use
 - Loading Software
 - Etc.
- Software “Borrowed” From...
 - Relative or Friend
 - Bit Torrent
 - Open Source
 - Etc.



Ethics/Legal Scenario

- Your boss asks you to write a library in C# to handle linked lists, including functions like insert, delete, sort, search, etc.
- You google “C# linked list” and find a very well written, very well documented library that does most of what you need.
- The web site explicitly says that everyone and anyone is free to use the library for any purposes whatsoever for free and forever.
- You download the library, add a bit of functionality, and submit it to your boss for inclusion in your company’s new product.
- Is this ethical? Legal? Who owns what?



Ethics/Legal Scenario

- You miss a meeting for your capstone team. You were at a party, but you tell your teammates that you were sick.
Is this ethical? Legal?
- You are being deposed under oath and you say that you missed your capstone meeting because you were sick when you were really at a party.
Is this ethical? Legal?

(Note: Rules and consequences change after graduation. Be careful!)



Ethics/Legal Scenario

- For your English literature class you are assigned a paper on Stephen Crane's novel *The Red Badge of Courage*. You buy a paper on termpaper.com and submit it.
Ethical? Legal?
- You work for a consulting firm and are assigned the task of evaluating routers and writing a whitepaper for a client. You google and find performance data and writing, which you use in your paper.
How about if you just use a great overview of routers and router technology?
Ethical? Legal?



Ethics/Legal Scenario

- You work at a company that stores sensitive data (medical records, social service records, etc.). You have access to data, and download them to your notebook computer, and bring it home to finish a report. You also back up a copy of the data to your home computer in order to work at home.

Is this ethical? Legal? Against company policy?



Ethics/Legal Scenario

You work as a software engineer on an medical equipment. The project is late and the software does not work to specifications. You think the issues are safety critical, but your boss, who has managed these kinds of projects for years, says it's of no concern. And, after all, the project is late and over budget.

What should you do? What would you do?



Ethics/Legal Scenario

You are a consultant, asked to evaluate designs and recommend a solution for a company. You conclude that one particular company has the best solution. However, you do not mention that you have a significant financial interest in the company you recommended.

Is this ethical? Legal?



Ethics/Legal Scenario

You have an idea for a company and a web site. You hire another MSU student to do some design work and initial programming. The student never does any work for you. Instead he/she goes off and start his/her own competing company and web site based on your ideas. His/her web site is a phenomenal hit. His/her company is valued at \$100B. Your company is valued at \$0.

Is this ethical? Legal?



Ethics/Legal Scenarios: Freebies

From a customer and/or vendor can you accept...

- ...shirts? SWAG?
- ...lunch or dinner?
- ...golf outing in Florida?
- ...golf clubs?
- ...educational cruise in the Bahamas?
- ...consulting contract for you?
- ...consulting contract for a family member?
- ...job for a family member?
- ...etc...?

