

# Ethics and Professionalism

## 1. **ethics**

- a. the discipline dealing with what is good and bad and with moral duty and obligation
- b. a set of moral principles or values
  - i. a theory or system of moral values
  - ii. the principles of conduct governing an individual or a group

## 2. **ethical**

- a. of or relating to ethics
- b. conforming to accepted professional standards of conduct

## 3. **Professionalism**

The conduct, aims, or qualities that characterize or mark a professional person

## 4. **Software Engineering Code of Ethics and Professional Practice**

Developed by ACM/IEEE-CS Joint Task Force on Software Engineering Ethics and Professional Practices - <http://www.acm.org/serving/se/code.htm>

Short Version

### PREAMBLE

The short version of the code summarizes aspirations at a high level of the abstraction; the clauses that are included in the full version give examples and details of how these aspirations change the way we act as software engineering professionals. Without the aspirations, the details can become legalistic and tedious; without the details, the aspirations can become high sounding but empty; together, the aspirations and the details form a cohesive code.

Software engineers shall commit themselves to making the analysis, specification, design, development, testing and maintenance of software a beneficial and respected profession. In accordance with their commitment to the health, safety and welfare of the public, software engineers shall adhere to the following Eight Principles:

1. PUBLIC - Software engineers shall act consistently with the public interest.
2. CLIENT AND EMPLOYER - Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.
3. PRODUCT - Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.
4. JUDGMENT - Software engineers shall maintain integrity and independence in their professional judgment.
5. MANAGEMENT - Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.
6. PROFESSION - Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.
7. COLLEAGUES - Software engineers shall be fair to and supportive of their colleagues.
8. SELF - Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.

# Ethics Cases Analysis

Instructions: Please read each of the cases that correspond to this form. Evaluate the ethical and professional issues indicated for each case by using the following criteria:

**unethical** does not conform to an appropriate standard of ethical/professional conduct.  
**not unethical** does not violate an appropriate standard of ethical/professional conduct.  
**no ethics issue** not issues of ethical/professional conduct were involved.

Case 1:

**software engineer:** Lewis not going beyond her immediate supervisor  
unethical not unethical no ethical issue

**superior:** telling Lewis to ignore malfunctions  
unethical not unethical no ethical issue

Applicable parts of the SE Code: \_\_\_\_\_

Comments: \_\_\_\_\_

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Case 2:

**project leader:** Cruz implementing an incomplete and inadequate system.  
unethical not unethical no ethical issue

**management:** ordering the system into production prematurely  
unethical not unethical no ethical issue

**management:** blaming the Cruz, the project leader  
unethical not unethical no ethical issue

Applicable parts of the SE Code: \_\_\_\_\_

Comments: \_\_\_\_\_

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Case 3:

**president:** marketing software that has bugs (defects)  
unethical not unethical no ethical issue

**president:** marketing product with disclaimer of responsibility  
unethical not unethical no ethical issue

**president:** arguing that his action is general industry policy  
unethical not unethical no ethical issue

Applicable parts of the SE Code: \_\_\_\_\_

Comments: \_\_\_\_\_

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Case 4:

**information security manager:** monitoring electronic correspondence of employees.  
unethical                                      not unethical                                      no ethical issue

**information security manager:** informing management of abuse  
unethical                                      not unethical                                      no ethical issue

**employees:** using mail system for personal communications  
unethical                                      not unethical                                      no ethical issue

**information security manager:** failing to ask management for rules on personal e-mail use  
unethical                                      not unethical                                      no ethical issue

**top management:** failure to set rules and inform employees  
unethical                                      not unethical                                      no ethical issue

**top management:** punishing employees based on the content of their e-mail  
unethical                                      not unethical                                      no ethical issue

Applicable parts of the SE Code: \_\_\_\_\_

Comments: \_\_\_\_\_

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Case 5:

**programmer:** use of co-worker code  
unethical                                      not unethical                                      no ethical issue

**programmer:** use of commercial software code  
unethical                                      not unethical                                      no ethical issue

**programmer:** failure to give credit to coworker or commercial software company  
unethical                                      not unethical                                      no ethical issue

**management:** unreasonable expectations of programmer  
unethical                                      not unethical                                      no ethical issue

Applicable parts of the SE Code: \_\_\_\_\_

Comments: \_\_\_\_\_

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Case 6:

<b>hacker:</b> initially looking for and accessing an on-line computer	unethical	not unethical	no ethical issue
<b>hacker:</b> using someone else's name to access the financial service	unethical	not unethical	no ethical issue
<b>hacker:</b> gaining access to and examining the financial services	unethical	not unethical	no ethical issue
<b>bank officials:</b> not providing sufficient protection for improper use of their services	unethical	not unethical	no ethical issue

Applicable parts of the SE Code: \_\_\_\_\_

Comments: \_\_\_\_\_

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Case 7:

<b>Roberto:</b> waiting until the last week to start the project	unethical	not unethical	no ethical issue
<b>Roberto:</b> getting clarification form a classmate	unethical	not unethical	no ethical issue
<b>Roberto:</b> looking at the classmate's project	unethical	not unethical	no ethical issue
<b>Classmate:</b> letting Roberto look at his project	unethical	not unethical	no ethical issue
<b>Professor Barnes:</b> Giving a vague and confusing problem	unethical	not unethical	no ethical issue
<b>Professor Barnes:</b> not giving help to Roberto	unethical	not unethical	no ethical issue

Applicable parts of the SE Code: \_\_\_\_\_

Comments: \_\_\_\_\_

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