Here's why you should care about ethics in software development
All views and opinions expressed in this talk are the personal views and opinions of the presenter and not those of his employer or other organisations
Ethics in practice

"in case of car accidents, the cloud decides if a broken knee is better than a broken arm" wait, what? #eclipsecon

@the_qa_guy · 4 Nov 2015

Alex Schladebeck @alex_schl · 4 Nov 2015
@the_qa_guy don't wanna be the tester for that feature :-(

Tobias Geyer @the_qa_guy · 4 Nov 2015
@alex_schl don't wanna be a developer for that feature! #ethics #eclipsecon

Tobias Geyer @the_qa_guy · 4 Nov 2015
@alex_schl also true! Some interesting (also scary) things coming in the future for this area!
Ethics in practice
No license fees are requested except for military and related uses, commercial (re)sale, optional commercial licenses are available, and donations are always welcome!
Ethics or moral philosophy is the branch of philosophy that involves systematizing, defending, and recommending concepts of right and wrong conduct.
Ethics and the quality criteria

- Functionality
- Reliability
- Usability
- Efficiency
- Maintainability
- Portability
Examples of codes of ethics

- IEEE Code of Ethics
- ACM Code of Ethics
- ISTQB Code of Ethics
- James Bach “Thoughts Toward The Ethics of Testing”
We, the members of the IEEE, in recognition of the importance of our technologies in affecting the
quality of life throughout the world, and in accepting a personal obligation to our profession, its
members and the communities we serve, do hereby commit ourselves to the highest ethical and
professional conduct and agree:
1. to accept responsibility in making decisions consistent with the safety, health, and welfare of the
   public, and to disclose promptly factors that might endanger the public or the environment;
2. to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected
   parties when they do exist;
3. to be honest and realistic in stating claims or estimates based on available data;
4. to reject bribery in all its forms;
5. to improve the understanding of technology; its appropriate application, and potential
   consequences;
6. to maintain and improve our technical competence and to undertake technological tasks for others
   only if qualified by training or experience, or after full disclosure of pertinent limitations;
7. to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and
   to credit properly the contributions of others;
8. to treat fairly all persons and to not engage in acts of discrimination based on race, religion, gender,
   disability, age, national origin, sexual orientation, gender identity, or gender expression;
9. to avoid injuring others, their property, reputation, or employment by false or malicious action;
10. to assist colleagues and co-workers in their professional development and to support them in
    following this code of ethics.

IEEE Code of Ethics
1.1 Contribute to society and human well-being.

- This principle concerning the quality of life of all people affirms an obligation to protect fundamental human rights and to respect the diversity of all cultures. An essential aspect of computing professionals is to minimize negative consequences of computing systems, including threats to health and safety. When designing or implementing systems, computing professionals must ensure that the products of their efforts will be used in socially responsible ways, that social needs, and will avoid harm to health and life. Computing professionals have the opportunity and responsibility to influence and improve human well-being including a healthy environment. Therefore, computing professionals who design and develop systems must be alert to, and make others aware of, any potential damage to local or global environment.

1.2 Avoid harm to others.

- "Harm" means injury or negative consequences, such as undesirable loss of information, loss of property, property damage, or unauthorized environmental impacts. This principle prohibits use of computing technology in ways that result in harm to any of the following: users, the general public, employees, customers, or third parties. The professional is responsible for ensuring that computer systems and processes will not cause harm. When computing professionals are given responsibility for modifying or creating computer systems, they must ensure that the systems do not result in harm to anyone. Additionally, when computing professionals are given responsibility for ensuring the quality and safety of computer systems, they must ensure that the systems do not result in harm to anyone.

1.3 Be honest and trustworthy.

- A computer professional has a duty to be honest about his or her own qualifications, and about any circumstances that might lead to conflicts of interest. Membership in volunteer organizations such as ACM may at times place individuals in situations where their statements or actions could be interpreted as representing the ACM or a larger group of professionals, so as member and representative care to not make statements or positions that might give the impression of representing the ACM, or any of its units.

1.4 Be fair and take action not to discriminate.

- Inequities between different groups of people may result from the use or misuse of information and technology. In a fair society, computing professionals are obligated to protect the rights of all individuals, regardless of race, sex, religion, age, disability, national origin or other such similar factors. However, these ideals do not justify or in any way condone the violation of this Code.

1.5 Honor property rights including copyrights and patent.

- Computing professionals are obligated to protect the interests of intellectual property owners. Specifically, one must not take credit for another's ideas or work, even in cases where the work has been acknowledged or approved. One must respect the right of others to control the use of their intellectual property. Computing professionals are obligated to protect the integrity of intellectual property. Specifically, one must not take credit for other's ideas or work, even in cases where the work has not been explicitly protected by copyright, patent, etc.

1.6 Give proper credit for intellectual property.

- Ownership of intellectual property is a basic tenet of society. The principle is reflected in the laws of most countries, and is inherent in the ethical code of the computing profession. Credit must be given where due to the intellectual effort of others.

1.7 Respect the privacy of others.

- Privacy is a fundamental human right. It is the right of individuals to have control over the information that describes them, and to decide who has access to that information. Privacy is a fundamental human right. It is the right of individuals to have control over the information that describes them, and to decide who has access to that information.

1.8 Honor confidentiality.

- Confidentiality is a fundamental right. It is the right of individuals to have control over information that describes them, and to decide who has access to that information. Confidentiality is a fundamental right. It is the right of individuals to have control over information that describes them, and to decide who has access to that information.
Recognizing the ACM and IEEE code of ethics for engineers, the ISTQB® states the following code of ethics:

- **PUBLIC** - Certified software testers shall act consistently with the public interest.
- **CLIENT AND EMPLOYER** - Certified software testers shall act in a manner that is in the best interests of their client and employer, consistent with the public interest.
- **PRODUCT** - Certified software testers shall ensure that the deliverables they provide (on the products and systems they test) meet the highest professional standards possible.
- **JUDGMENT** - Certified software testers shall maintain integrity and independence in their professional judgment.
- **MANAGEMENT** - Certified software test managers and leaders shall subscribe to and promote an ethical approach to the management of software testing.
- **PROFESSION** - Certified software testers shall advance the integrity and reputation of the profession consistent with the public interest.
- **COLLEAGUES** - Certified software testers shall be fair to and supportive of their colleagues, and promote cooperation with software developers.
- **SELF** - Certified software testers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.
Ethical Principles by James Bach

• Know what a test is. Avoid labeling an activity as a “test” unless it represents a sincere effort to discover a problem in a product.
• Maintain a reasonable impartiality. The purpose of testing is to cast light on the status of the product and its context, in the service of my clients. I may play multiple roles on a project, but my purpose, *insofar as I am a tester*, is not to design or improve the product.
• Do not claim to assure, ensure, or control quality. I don’t control anything about the product: a tester is a witness. In that capacity, I strive to assist the quality creation process.
• Report everything that I believe, in good faith, to be a threat to the product or to the user thereof, according to my understanding of the best interests of my client and the public good.
• Apply test methods that are appropriate to the level of risk in the product and the context of the project.
• Alert my clients to anything that may impair my ability to test.
• Recuse myself from any project if I feel unable to give reasonable and workman-like effort.
• Make my clients aware, with alacrity, of any mistake I have made which may require expensive or disruptive correction.
• Do not accede to requests by my client to work in a wasteful, dangerous, or deceptive way. (e.g. I will not keep test case metrics, because they are damaging in almost any context)
• If I do not understand or accept my mission, it shall be my urgent priority to discover it or renegotiate it.
• Do not deceive my clients about my work, nor help others to perpetrate deception.
• Do not accept tasks for which I am not reasonably prepared or possess sufficient competence to perform, unless I am under the direction and supervision of someone who can guide me.
• Study my craft. Be alert to better solutions and better ways of working.
Facebook:

Punkt **1.1 Contribute to society and human well-being.**

This principle concerning the quality of life of all people affirms an obligation to protect fundamental human rights.

Punkt **1.2 Avoid harm to others.**

To minimize the possibility of indirectly harming others, computing professionals must minimize malfunctions by following generally accepted standards for system design and testing.

Autonomes Fahren:

Punkt **1.1 Contribute to society and human well-being.**

An essential aim of computing professionals is to minimize negative consequences of computing systems, including threats to health and safety.
Abgasmanipulation:

Punkt **1.1 Contribute to society and human well-being.**
Therefore, computing professionals who design and develop systems must be alert to, and make others aware of, any potential damage to the local or global environment.

Punkt **1.3 Be honest and trustworthy.**
The honest computing professional will not make deliberately false or deceptive claims about a system or system design, but will instead provide full disclosure of all pertinent system limitations and problems.

G4U:

**1.2 Avoid harm to others.**
This principle prohibits use of computing technology in ways that result in harm to any of the following: users, the general public, employees, employers.

[...]
Well-intended actions, including those that accomplish assigned duties, may lead to harm unexpectedly.
Now what?

How do we proceed now?
A brief detour
A brief detour
“Introduction of the Hippocratic Oath for testers

Ethical testing becomes a new trend. Testers that take the Hippocratic Oath, like physicians, are opening a new market. The Volkswagen rogue testing case has shown there is business value in ‘doing good’, or a ‘don’t be evil’ strategy. Business—wise, companies can’t afford unethical behaviour.

In 2016 we’ll see more companies and other industries exposed in the media for their unethical testing practices. Who will be the next Volkswagen and how will testers respond?”
The solution
Questions?

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