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Facsimile Memorandum

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Subject:Code of Ethics for Software Engineers

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In addition to this 6 page transmittal and answer to your email will follow.

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CODE OF ETHICS FOR SOFTWARE ENGINEERS**INTRODUCTION**

Computers now have a central and growing role in commerce, industry, government, medicine, entertainment, and much of ordinary life. Because the utility of computers depends in large part on the instructions written for them, those who design, develop, and test software have enormous opportunities both to do good and to cause harm. To assure, as much as possible, that this power will be used for good, software engineers commit themselves to making the design, development, and testing of software a distinct, useful, and respected profession. In accordance with that commitment, software engineers shall adhere to the following standards of conduct.

1. PRODUCT. Software engineers shall, insofar as possible, assure that the software on which they work is useful to public, employer, and user, completed on time and at reasonable cost, and free of significant error. In particular, software engineers shall, as appropriate:

1.01. Assure proper goals and objectives for any project on which they work.

1.02. Assure proper development methodology on any project on which they work.

1.03. Assure proper management on any project they work.

1.04. Assure proper testing, debugging, Case Tools, GUI, and so on. (better way to say this?)

1.05. Approve only safe and accurate documents.

1.06. Assure proper privacy, accuracy, property, access, and people. (?)

1.07. Assure proper estimates of cost, schedule, personnel, and outcome on project on the work.

1.08. Assure specifications are fully understood. (by whom?)

1.09. Assure environmental issues addressed.(?)

1.10. Promote maximum productivity and minimum cost to employer, user, and public.

1.11. Establish quality control policies and procedures.

1.12. Evaluate the effects on business and culture of any software on which they work.

1.13. Implement ethical evaluation.(?)

Meet changes as they occur. (?)

departure from the norm can be justified
defining "usual circumstances" should be

a matter of professional judgment.
Have adequate technical training and
proficiency
independence in mental attitude
Due professional care

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adequately planned and supervised. understand broad fundamentals. Put forth best effort
Show initiative on projects See through to successful finish Don't try to do it all
yourself Don't ignore signs of trouble Don't dodge the issues view matters from others
points of view

2.PUBLIC. Software engineers shall, in their professional role,
act only in ways consistent with the public safety, health and
welfare. In particular, software engineers shall:

2.01. Disclose to appropriate persons any danger that the software on which they work may
pose to the user, a third party, or the environment.

2.02. Judge the software from the standpoint of society as a whole.

2.03. Be neutral in preparation, that is, not put self-interest, interest of employer, or
interest of client ahead of the public's interest.

2.04. Accept full responsibility for their work.

2.05. Present their work fairly.

2.06. Maintain professional skepticism with respect to any software they are asked to
evaluate.

2.07. Avoid conflicts of interest insofar as practical and fully disclose them to all
parties concerned when they do exist.

2.08. Reject bribery.

2.09. Accept no payback, kickback, or other payment from a third party to a contract,
except with consent of all parties to the contract.

2.10. Make no political contribution, gift, or commission for award of contract.

2.11. Associate only with reputable business.

2.12. Recognize and report problems to proper authorities; cooperate in efforts to
correct problems.

2.13. Be objective and truthful in all public statements.

3.CLIENT AND EMPLOYER. Software engineers shall, consistent with the public health,
safety, and welfare, always act in professional matters as faithful agents and trustees
of their client or employer. In particular, software engineers shall:

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- 3.01. Represent no interest adverse to their employer's without the employer's consent.
- 3.02. Not use employer's equipment for outside work without employer's consent.
- 3.03. Not use pirated software.
- 3.04. Respect ownership. (of what?)
- 3.05. Provide service only in areas of competence.
- 3.06. Accept no outside work detrimental to regular work.
- 3.07. Affix their signature only on documents prepared under their supervision and within their areas of competence.
- 3.08. Accept payment from only one party for any particular project, or for services related to the same project, except when the circumstances are fully disclosed to parties concerned and they have given their informed consent.
- 3.09. Decline to contract for a service provided by self. (conflict of interest?)
- 3.10. Keep confidential information gained in their professional work that is not properly in the public domain.
- 3.11. Inform client or employer promptly if project will fail.

voice concerns

4. PROFESSION. Software engineers shall, in all professional matters, seek to advance both the integrity and reputation of their profession. In particular, software engineers shall:
- 4.01. Assure that clients, employers, and supervisors know of this code of ethics.
 - 4.02. Support software engineers who do as this code requires.
 - 4.03. Help develop an organizational environment favorable to acting ethically.
 - 4.04. Obey all laws governing their work, insofar as consistent with the public health, safety, and welfare.
 - 4.05. Only accept a salary appropriate to professional qualifications.
 - 4.06. No promotional efforts without consent (?)
 - 4.07. Be accurate in stating the characteristics of software on which they work, avoiding not only false claims but claims that might reasonably be supposed deceptive, misleading, or doubtful.
 - 4.08. Admit their own errors.

4.09. Take responsibility for detecting errors (in what?) and irregularities and reporting to

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appropriate authority.

4.10. Not permit professional standards to be compromised.

4.11. Not promote their own interest at expense of the profession.

4.12. Serve in civic affairs constructively.

4.13. Extend public knowledge of software engineering.

4.14. Share useful inventions and discoveries with the profession by reading papers at professional meetings, by publishing articles in the technical press, and by serving on the profession's standard-setting bodies.

Avoid fads.

Develop ethical check lists

Develop review process

Develop contingency plans

Assure data is accurate and legitimate; kept confidential; authorized use

Customer fulfillment

5. COLLEAGUES. Software engineers shall treat all those with whom they work fairly. In particular, software engineers shall:

5.01. Assist colleagues in professional development.

5.02. Review the work of other professionals only with their knowledge.

5.03. Credit fully the work of others.

5.04. Criticize the work of others in an objective and properly-documented way.

5.05. Assure that employees are informed of standards before being held to them. (Is this what was meant?)

5.06. Not attract engineer falsely.

5.07. Assure only qualified signatures from others.

5.08. Make work assignments only upon considerations of talent, education, experience, and potential for development.

5.09. Develop positive agreement on ownership. (of what?)

5.10. Not supplant another engineer after steps have been taken for employment.

5.11. Offer only fair and just compensation.

5.12. Never invade another division's domain without knowledge. (?)

5.13. Give fair hearings. (to what?)

5.14. Not prevent a subordinate taking better job.

5.15. Assure employees know employer's policies and procedures protecting passwords, files, and other confidential information.

to cooperate with proper authorities

to work in competent areas

to state opinion vs fact

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Assure commitment

6. SELF. Software engineers shall, throughout their career, try

to enhance their own ability to practice their profession as it should be practiced. In particular, software engineers shall:

6.01. Improve their understanding both of the software on which they work and of the environment in which it will operate.

6.02. Improve their ability to create safe, reliable, and useful software at reasonable cost and within a reasonable time.

6.03. Improve their knowledge of this code, its interpretation, and its application to work they do.

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