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软件工程

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1.3

Ethical Issues



Ethical Issues

- ◆ Software products are developed and maintained by humans. If those individuals are hard working, intelligent, sensible, up to date, and above all, *ethical*, then the chances are good that the way that the software product they develop and maintain will be satisfactory.
- ◆ Unfortunately, the converse is equally true.

Ethical Issues

- ◆ **Software Engineering Code of Ethics and Professional Practice**
 - **The Association for Computer Machinery (ACM)**
 - **The Computer Society of the Institute of Electrical and Electronics Engineers (IEEE-CS)**

Ethical Issues

■ Software engineers should adhere to 8 principles:

1. Public----Software engineers shall act consistently with the public interest.

- ◆ To develop and spread virus
- ◆ To steal people's personal information from their mobiles
- ◆ To destroy a city or the earth



Ethical Issues

- Software engineers should adhere to 8 principles:

2. Client & Employer----Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.

- ◆ To implant a potential bug into the software.



Ethical Issues

- **Software engineers should adhere to 8 principles:**
 - 3. Product----**Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.
 - ◆ To get the best product and service within budget for the public, clients and employer.



Ethical Issues

- Software engineers should adhere to 8 principles:

4. Judgment----Software engineers shall maintain integrity and independence in their professional judgment.

- ◆ To do everything your clients and employer tell you to do, even though it is evil?



Ethical Issues

- Software engineers should adhere to 8 principles:

5. Management----Software engineering managers and leaders shall subscribe to the promote an ethical approach to the management software development and maintenances.

- ◆ These people are influential.



Ethical Issues

- Software engineers should adhere to 8 principles:

6. Profession----Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.

- ◆ He should be good, honest, and proud of his job, his profession.
- ◆ He is responsible for the reputation of the whole industry.



Ethical Issues

- Software engineers should adhere to 8 principles:
 - 7. **Colleagues**----Software engineers shall be fair to and supportive of their colleagues.
 - ◆ Do NOT do harm to your colleagues.



Ethical Issues

- **Software engineers should adhere to 8 principles:**
 - 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.
 - ◆ To be a good software person as long as you are in this industry.



DISUCSS -- 1

- ◆ **Some organizations assign an email box to each staff for business. That is, each employee has an email box at his organization. Some employer thinks that the email boxes belong to the organization just like the documents and the archives. But many employees declare that the email box is personal and no one has the right to check it but himself.**
- ◆ **What's your opinion?**



DISUCSS -- 2

- ◆ **Please explain one or some of the software engineering codes of ethics with some stories from your life or the society, or movies.**