

Professionalism & Software Engineering

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Outline

- Valuing your profession
- Work Ethic
- Software Engineering Ethics
- Saying Yes
- Saying No

Work Ethic

- Respect people's time
 - Never be late
 - If there is a risk of being late, the other parties must be notified before
- Communicate professionally, communicate often, provide updates,
- Re-Negotiate deadlines before the deadline
- Be transparent with work, give deliverables, reports and provide evidence
- Be a teamplayer, look out for colleagues and support them

Valuing your profession

- SE and careers in tech in general are in high demand
- There are many opportunities for competent professionals they have the benefit of choice
- Establish a personal standard and try to abide to it as much as possible
- Vet your potential employers for exploitative practices, malpractice, undervaluing the profession and exhibiting bad work culture
- Property rationalize the value of every opportunity
- Tread carefully the line of entitlement vs integrity
- Ensure opportunities taken are in service of your wider career goals

How much does a Software Engineer make?

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Seniority Levels

L2	Software Engineer
	\$108,249 /yr
L3	Senior Software Engineer
	\$131,206 /yr
L4	Software Engineer IV
	\$141,706 /yr

[Career Path](#)

The national average salary for Software Engineer is \$108,249 per year in United States. Filter by location to see Software Engineer salaries in your area. Salaries estimates are based on 314918 salaries submitted anonymously to Glassdoor by Software Engineer employees.

Software Engineering Ethics

Like other engineering disciplines, software engineering is carried out within a social and legal framework that limits the freedom of people working in that area. As a software engineer, you must accept that your job involves wider responsibilities than simply the application of technical skills. You must also behave in an ethical and morally responsible way if you are to be respected as a professional engineer.

It goes without saying that you should uphold normal standards of honesty and integrity. You should not use your skills and abilities to behave in a dishonest way or in a way that will bring disrepute to the software engineering profession. However, there are areas where standards of acceptable behavior are not bound by laws but by the more tenuous notion of professional responsibility.



Software Engineering Ethics

1. Confidentiality You should normally respect the confidentiality of your employers or clients regardless of whether or not a formal confidentiality agreement has been signed.
2. Competence You should not misrepresent your level of competence. You should not knowingly accept work that is outside your competence.
3. Intellectual property rights You should be aware of local laws governing the use of intellectual property such as patents and copyright. You should be careful to ensure that the intellectual property of employers and clients is protected.
4. Computer misuse You should not use your technical skills to misuse other people's computers. Computer misuse ranges from relatively trivial (game playing on an employer's machine) to extremely serious (dissemination of viruses or other malware).

Software Engineering Ethics - ACM/IEEE Code

Software Engineering Code of Ethics and Professional Practice

ACM/IEEE-CS Joint Task Force on Software Engineering Ethics and Professional Practices

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.

Saying “YES”

- You are making a commitment
- Professionals:
 - Must abide to their commitments
 - Must provide accurate estimations rather than precise ones eg 3-5 weeks vs an exact date
 - Must be accountable for their actions



Saying “NO”

Management doesn't have a deep understanding of your field that you do (that's why they hired you). They often don't understand how much time a task could take or if it even makes sense to invest resources in some tasks. Your management is counting on you to defend your objectives and not just agree with everything that they say. Be assertive. Both you and your manager need to get to the best possible outcome through negotiation. I'm not saying you should always say “No”, but keep in mind that professionals are expected to disagree.

Mike: “Paula, I need the login page done by tomorrow.”

Paula: “Oh, wow! That soon? Well, OK, I'll try.”

Mike: “OK, that's great. Thanks!”



References & Related Resources

- [TI DR The Clean Coder by Robert Martin](#)
- [7 Freelancing Lessons Learnt the Hard Way](#)
- [Intrapreneurship](#)
- [Saying No](#)
- [Design Hell](#)