

CS212

Softskills

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Announcements

- P3 is still due.
- No class next week (Thanksgiving)

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Soft Skills

- What are they?
 - People skills
 - Communication skills
 - Writing
 - Speaking
 - Web/art/...
- Why are they important?
 - Jobs, careers
 - Getting
 - Maintaining
 - Improving
 - Productivity

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Relevance

- Why are soft skills important for CS?
 - Public/popular perception, stereotypes
 - Realities
 - Career shifts, promotion
- Software engineering:
 - Programming in teams
 - Pair programming, extreme programming
 - Client, business relationships
 - Technical support, q/a, marketing
 - Business, consulting
 - Legal
- CIS 300 plug :-)

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More Motivation: Interviews

- Common to ask technical and non-technical issues?
- Scenarios?
- Others?

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Management

- Management
 - <http://www.pmi.org/projectmanagement/project.htm>
 - ***Project Management**: the application of knowledge, skills, tools and techniques to a broad range of activities in order to meet the requirements of the particular project*
- Academic version:
 - Resources: mainly time
 - Management: mainly shared, except in large groups
 - Scheduling: mainly due dates
 - Review: grades

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Management Schemes

- Total quality management: ***TQM***
 - <http://www.gslis.utexas.edu/~rpollock/tqm.html>
- ***Matrix management***:
 - <http://www.strategicfutures.com/matrices.htm>
- ***Six sigma***
 - <http://www.ge.com/sixsigma/>
 - <http://www.6-sigma.com/>
- QSC...

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Leadership

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Teamwork

- Forming a team and duties: assign roles!
 - leader
 - secretary
 - other roles?
 - administration (names, emergency contact info)
 - meetings
- Group dynamics: later in this lecture
- Demonstration (presentations):
 - Think of it as performance
 - Practice!

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How to Lose

- Ten proven ways to make your group project harder
(Adapted from Andrew Meyers's *How to lose in CS 412*)

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Divorce

What should you do if you have been working with the same partner all semester, but no longer wish to continue the relationship? It's like any "breakup" you might face as with bandmates, significant others, friends, and lovers. There is no easy way to sever the ties, but some ways are better than others. What is the best thing to remember? Speak in terms of I-statements.

Delaying the inevitable will just worsen matters, so resolve to end the relationship as soon as possible. Talk with the person and explain in calm terms your reason(s) for needing to sever the relationship. For instance, you might say, "I'm sorry, but I need to work on my own or with another partner for the rest of the semester." If you find such conversations difficult, you might wish to practice what you will say in advance out loud.

If your soon-to-be ex-partner asks why, avoid you-statements. In general, statements starting with you are this and you are that encourage arguments and defensiveness because of the implied, perceived, or directed insult. Before using a you-statement, consider that each of us tends to love or hate things in others that we see reflected in ourselves. A you-statement speaks of oneself, so choose them with care....

Instead, try I-statements, such as saying, "I want to end the partnership because I'm not happy" or "I need a different partner to advance my CS degree," to lessen the blow and avoid a hurtful blame-game. Do not despair if you feel guilty afterwards. You are responsible for your own growth, which is painful, sometimes. Your ex-partner must also grow, so you may not only ultimately be helping yourself, but your partner as well.

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DIS Case Studies

- Oswego River's Murky Water:
 - contractors
 - professional ethics
 - concrete
 - motorboats
- Space Colonization:
 - problem members and coups
 - academic teams and suits
- My "W" and The Sub Shoppe
 - cooperative effort
 - reaping rewards from hard work...

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Groups

- **Group Dynamics:**
 - How people work together
 - <http://ctl.stanford.edu/Tomprof/postings/581.html>
- Why groups?
 - combine talents, wider pool of knowledge
 - Training
 - self-policing
- Two components:
 - the interaction of team members
 - the life cycle of a group
- Common processes all groups encounter
 - **forming**
 - **storming**
 - **norming**
 - **performing**
 - **adjourning**

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Forming and Storming

- **Forming:**
 - caution
 - excitement
 - formality
- **Storming:**
 - personalities (and quirks) arise
 - models of communication and working
 - possible conflicts
 - is conflict bad?
 - the art of the "I statement"

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Norming, Performing, Adjourning

- **Norming:**
 - conflict resolution
 - roles clarify
 - finding ways to work
- **Performing:**
 - energy spent on working, not fighting
 - trust, respect
 - industry: "self-directed work teams"
- **Adjourning:**
 - separation anxiety
 - sadness
 - saying good-bye...

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