Software Development Teams

Importance of People in Software Engineering
Understanding Team Effectiveness
Conflict and conflict resolution
Code of Conduct
If you find yourself concentrating on the technology rather than the sociology, you're like the vaudeville character who loses his keys on the dark street and looks for them at the adjacent street because, as he explains, “The light is better there”.

Tom DeMarco
Q: Why Do Software Projects Fail?
A: People
Understanding Team Effectiveness

• Major Google study of 180 teams world-wide
  – Gathered data on team members (attitudes, skills, personality, etc)
  – Used statistics to identify factors that correlated with performance
Understanding Team Effectiveness

• Factors:
  – Colocation of teammates
  – Consensus-driven decision making
  – Extroversion of team members
  – Individual performance of team members
  – Workload
  – Seniority
  – Team size
  – Tenure

These did not significantly impact the performance measured used by Google in their study.

This does not mean that these are not important factors in other settings or other regards.
1. Psychological Safety
   Team members feel safe to take risks and be vulnerable in front of each other.

2. Dependability
   Team members get things done on time and meet Google’s high bar for excellence.

3. Structure & Clarity
   Team members have clear roles, plans, and goals.

4. Meaning
   Work is personally important to team members.

5. Impact
   Team members think their work matters and creates change.
Conflict Resolution Strategies

Conflict is a part of any work environment.
Working under stress is bound to cause problems.
Conflict Resolution Strategies

1. Define Acceptable Behavior
2. Don’t Avoid Conflict
3. Choose a Neutral Location
4. Start with a Compliment
5. Don’t Jump to Conclusions
6. Think Opportunistically, Not Punitively
7. Offer Guidance, Not Solutions
8. Constructive Criticism
9. Don’t Intimidate
10. Act Decisively

Stephanie Ray, 2018, 10 Conflict Resolution Strategies that Actually Work
Code of Conduct

You have two primary responsibilities:

- **Promote** an inclusive, collaborative learning environment.
- **Take action** when others do not.

Professionally, we adhere to ACM's Code of Ethics. More broadly, a course like COMP1110 involves reflection, collaboration, and communication. Computer science has a checkered history with respect to inclusion – in corporate environments, in our classrooms, and in the products we create. We strive to promote characteristics of transparency and inclusivity that reflect what we hope our field becomes (and not necessarily what it has been or is now).

**We reject behavior that strays into harassment, no matter how mild.** Harassment refers to offensive verbal or written comments in reference to gender, sexual orientation, disability, physical appearance, race, or religion; sexual images in public spaces; deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of class meetings, inappropriate physical contact, and unwelcome sexual attention.

If you feel someone is violating these principles (for example, with a joke that could be interpreted as sexist, racist, or exclusionary), it is **your responsibility to speak up**! If the behavior persists, send a private message to your course convenor to explain the situation. We will preserve your anonymity.

*(This code of conduct was developed by Evan Peck of Bucknell University. Portions of this code of conduct are adapted from Dr. Lorena A. Barba)*