# CSC290 Communication Skills for Computer Scientists

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Lecture 4; September 30, 2019

### Reminder: Tutorial 4 Mandatory

Tutorial 4 is **mandatory**. Attendance will be taken at the start of the tutorial.

- You will be grouped into teams in tutorial 4, choose your project, and get started
- ▶ Penalty: -5% on the presentation plan
- If there is a legitimate reason why you cannot make tutorial 4, you must contact me **before** your tutorial

Reminder: Critical Review

Critical review due October 6, 2019

RGASC Drop In for Critical Review

- October 3rd 1pm-4pm
- North Building 3rd Floor
- ► This support is **in addition** to the regular RGASC support (you can still make appointments!)

### **Today**

#### First hour:

- Group development
- Interpersonal communication
  - "I" statements
  - Perception Checking

#### Second hour:

- Clarity in Technical Writing
- ▶ Blog Review



### Tuckman's Stages of Group Development

#### Forming

Team acquaints and establishes around rules. Formalities are preserved and members are treated as stranaers.



#### Storming

Members start to communicate their feelings but still view themselves as individuals rather than part of the team. They resist control by group leaders and show hostility.



#### Norming

People feel part of the team and realize that they can achieve work if they accept other viewpoints.



#### Performing

The team works in an open and trusting atmosphere where flexibility is the key and hierarchy is of little importance.



#### Adjourning

The team conducts an assessment of the year and implements a plan for transitionina roles and recognizing members' contributions.



### **Forming**

- Most team members are positive, polite, and excited about what lies ahead
- Some team members are anxious, because there is uncertainty about what the team will do

This stage can last for some time, as people start to work together, and as they make an effort to get to know their new colleagues.

- Establish clear objective: what do you want to accomplish as a team?
- ► Clearly define the roles and expectations of the team members

### Storming

- ► Team members push against the boundaries established in the forming stage
- This is the stage where many teams fail
- Conflict between team members' natural working styles causes frustration
- People may feel overwhelmed by their workload
- Team members who stick with the task at hand may experience stress

#### This stage is expected!

- Establish process and structure to resolve conflicts quickly
- Work on building relationships and building trust between team members
- Balance your needs with the needs of other team members
- Separate the person from the problem

### Norming

- ► Team members resolve their differences, and appreciate each others' strengths
- ► The team might socialize together, ask for each others' help, and provide constructive feedback
- ▶ There is good process towards the team goal
- Group cohesiveness and identity starts to develop

Often, there is overlap between storming and norming as new tasks come up.

### Performing

- ► Team members are highly motivated to work, and are very productive
- ► Team roles are flexible and functional
- ▶ There is pride in being a member

### Project Plan

Think of your project plan as a "contract"

- ▶ What is the team's goal? What do you want to accomplish?
- How will you split up the tasks?
- How will you communicate each other?
- ► How will you address problems, and be accountable to each other?

## Qualities of a Well Functioning Team

- Roles are well defined
- Consensus can be reached
  - Consensus: moving forward with a decision regardless of agreement; "every team member can move forward without bad mouthing the decision"
- Respectful environment

### Qualities of a Balanced Team

- Acknowledge each others' strengths and contributions!
- ▶ Be considerate of other people's communication preferences
- Allow group members to have ownership of deliverables and deadlines

#### Communication Skills for All Team Members

- Explain your own ideas clearly
- Express your feelings in an open but non-threatening way
- Listen carefully to others
- Ask questions to clarify others' ideas & emotions
- Can sense how others feel based on their nonverbal communication
- Initiate conversations about group or process if you sense tensions brewing
- Reflect on activities & interactions of your group

### Non-contributing team members?

- Make excuses harder
  - Have a list of tasks, and put names and dates on them
  - Share contact information
  - Every N days, email each other on what you've done
  - If you don't get an email, contact the team member and ask for an update

(from https://web.skilling.us/lesson/freeloaders)

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  - ► Try using tools like Google Calendar to stay organized. What will you do to make up for it?

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- "You can help a friend, right?"
  - ► Sure, just like you want to help your friends, right? Shouldn't a friend be doing their share of the work?

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- "You can help a friend, right?"
  - ► Sure, just like you want to help your friends, right? Shouldn't a friend be doing their share of the work?
- ▶ (silence)
  - ▶ Well, I guess it's time to tell Lisa to take you off the team.

(from https://web.skilling.us/lesson/freeloaders)

### Breaking up

- Each team member must contribute to every part of the group project
- For written work, each team member will write an addendum listing their personal contributions
- If a person does not contribute to any part of the project, they will be removed from the team, and won't be able to earn a grade

Please tell Lisa right away if someone is not contributing in your team!

What if...

- What if you are sick, and can't complete a part of the assignment?
  - ▶ Tell your team members and Lisa as soon as possible.
- What if your team member has contributed in the past, but stopped?
  - ▶ Try to reach out to them. If they don't respond, talk to Lisa.

Can you think of other difficult scenarios?



# Interpersonal Communication

► How not to be a jerk

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- ► How not to be a jerk
- ▶ How not to <del>be</del> come off as a jerk

#### Scenario

One of your group members has been missing group meetings recently and has contributed very little to the group. The assignment deadline is approaching and the individual has not responded to your last meeting request. The meeting is in 2 days.

#### "I" Statements

Accept responsibility for your feelings

#### Instead of:

You're going to make us fail the project because you didn't finish your part!

#### Say:

I feel frustrated and concerned when you don't come to meetings with your completed part of the project because I don't want our project to fail.

#### "I" Statements

Avoids blame, hostility, and accusations, while expressing your emotions.

I feel... (State your emotion) when you... (describe their behavior or under what conditions you feel this way) because... (explain why their behavior or the conditions cause you to feel this way).

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#### Worksheet

What's wrong with this?

I feel like you are intentionally sabotaging the project when you rewrite my slides because I spent a lot of time on them.

### Another example

Slightly different format, but accepts responsibility for own feelings:

I'm feeling frustrated because I spent a lot of time on these slides. Would you be willing to share areas where the slides align with the group's goals, as well as those where they may not?

# Perception Checking

# Perception Check



Figure 1: What do you see?

### Perception Check

A way to check your understanding of someone's words or behaviour in a way that reduces defensiveness or potential conflict.

#### Format:

- 1. **Description**: of words or behaviour observed.
- 2. **Interpretations**: two possible interpretations of the behaviour.
- 3. Clarification: request for clarification.

Avoids blame / hostility / accusations.

### Perception Check Example

- ▶ Description: "When you didn't respond to my last email"
- ▶ Interpretations: "I wasn't sure if I said something wrong, or if you were really busy"
- ► Clarification: "What's going on?"

#### Worksheet

What's wrong with this?

When you looked bored at the last meeting, I wasn't sure if you thought the content was too repetitive or if you just weren't interested. What's up with that?

### Perception Checking is about Listening

Sometimes people want to be heard and understood, not necessarily to convince you.

People need to feel appreciated and listened to.

### Being Assertive

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You haven't been responding to our meeting requests. Have you been getting these emails, or does the time not work for you? Could you let us know if there is a better way to get through to you? I really don't think we can push the meeting back further. We want you to be a part of the team, but if you don't respond we'll have to meet without you and talk to Lisa.

# Hanlon's razor (modified)

Never ascribe to malice that which is adequately explained by incompetence things going wrong.

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- ▶ People are generally *not* jerks.
- Things go wrong all the time.

### Be Respectful, Be Kind

Everyone you meet is fighting a battle you know nothing about.

Be someone that others find easy to work with.

#### References

- 0. CSC290 Slides, Fall 2017, by Nia McCash
- 1. https://compassioncoach.com/blog/when-use-i-statements
- 2. http://www.creducation.net/resources/perception\_checking/
- 3. https://alistapart.com/article/people-skills-for-web-workers



### Ambiguous Pronouns

- Jake told James that he passed the course.
- ► The code is written in the programming language Perl. It is difficult to read.
- Writing prose is not like writing code. It requires a different kind of creativity.
- Code review is an important part of your job. It is imperative that you do it.
- ▶ Most people think writing is not important. This is false.



# What is technical writing?

Any writing that communicates technical material.

#### Examples:

- User manual
- Documentation
- ► Help files
- ▶ Bug report
- Instructions

## Characteristics of Technical Writing

- Dense, difficult material that needs many sign posts and transition words to keep readers on track.
- Clarity and precision is most important.
- Often involves symbols (mathematical symbols, function names, etc) that need to be differentiate from words.
  - ▶ Symbols increase clarity, but makes the writing more dense.
  - ▶  $\forall x \in y, x \leq 3$

## **Technical Writing**

- Week 4 (Today):
  - Clarity and structure
- ▶ Week 7:
  - ► Technical and Mathematical Writing
  - Proofreading and Editing
- ▶ Week 10:
  - Technical Writing and Style

## Blog Post Sample 1

I highlighted phrases in the blog post that is *unclear* or *incorrect* 

**Exercise:** Explain what is the issue with each highlighted phrase.

# Blog Post Sample 2

**Exercise:** Identify and highlight issues in the blog post.

### Your blog post

#### **Exercise:**

How can you improve your blog post to be more clear, and easier to follow?

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