

# COSC 499: Capstone Software Engineering Project

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# Last Class: Impact on Our Capstone Course

- Factors that our class will explicitly consider:
  - **Shared processes** - teams must follow industry-standard Git collaboration process
  - **Trust/psychological safety/sense of belonging** - maximize your social preferences
  - **Interdependence** - analysis of task assignment and completion
  - **Equity in workload distribution** - we will measure in multiple ways
  - **Meaningful purpose** - you carve out your project
  - **Diversity of skills** - things you should consider when selecting teammates
  - **Performance feedback** - regular peer and staff evaluations

# Current Focus

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  - **Performance feedback** - regular peer and staff evaluations
- We will go over these throughout the course

For now, let's focus on trust and skills in forming teams

# Who are Ideal Teammates?

- Studies show that 40% of teams formed based on friendships lead to project failure
  - Friends don't always have complimentary skills to support you
  - More peer pressure in conversations and peer evaluations
  - Handling conflicts with friends is hard
- How to form successful teams?



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  - Specific skills relevant to chosen project
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- Others?
  - Creativity, troubleshooting approach, ...



# "Speed Dating" Ice Breaker

- Pick one worksheet
  - Consider previous factors
  - Fill out the worksheet about other students
- Split into four large groups (one corner each)
- Within each group
  - Form an outer circle and an inner circle
  - Chat with the person you are facing for ~4 min
  - Outer circle rotate ::Repeat x5
- Students in outer circles move to another group ::Repeat x3
- If you have a clique – can sit out and let me know



[Continue next class as needed]

# After Teams are Formed

- Forming good teams is for maximizing chances of success
  - Not a guarantee!
- Ongoing management is crucial to maintain **productivity** (the outputs) and **satisfaction** (internal to the team)
  - Most team theories is about recognizing what stage the team is at and moving/keeping it at a productive stage
- **Quality** of work outputs is usually high if both productivity and satisfaction are high

# Team Management in Capstone

- **Productivity**
  - In-person conversations for detailed project support
- **Satisfaction and productivity**
  - Checkpoint reports and peer evaluations to estimate team stage
  - Special clause on teamwork (next slide)
- **Work quality**
  - Course milestones: project plan, mini presentations, design doc + demo, peer testing session + doc, final doc + demo
  - "doc" details TBD

# Special Clause on Teamwork

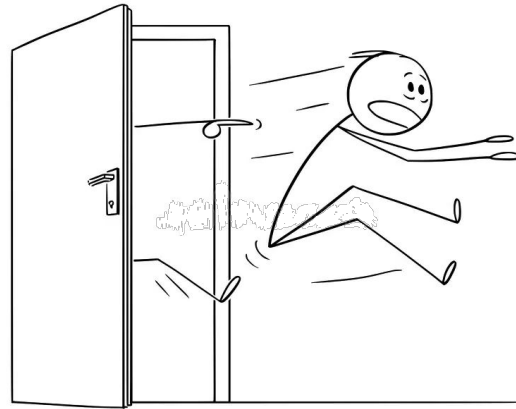
## Firing a teammate

A team can fire one of its members if:

1. All the other members have consulted the issues with the individual in question (proof is approved by the instructor), **and**
2. All the other members independently agree that this individual needs to leave the team.

In this case, the fired individual has 3 calendar weeks to do one of the following:

- i. Convince the original team to reconsider
- ii. Convince another team for adoption
- iii. Work independently for the rest of the project and receives 0 for all remaining marks toward the "Team" portion of the grade



## Next Steps



- Complete "Team Formation" on Canvas **by Sunday 11:59pm**
  - Late submissions may result in not having your preferences considered
- We will generate teams (hopefully finalized before next class)
  
- Next week: Projects
  - Scoping your project requirements
  - Writing the project plan
  - IP agreement (if applicable)
  - Roles of client and teaching staff