Design and Build Intelligent Systems

Introduction

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Uncertainty

Photo by Alexander Milo on Unsplash

Understanding and Reasonable Expectations

for Everyone

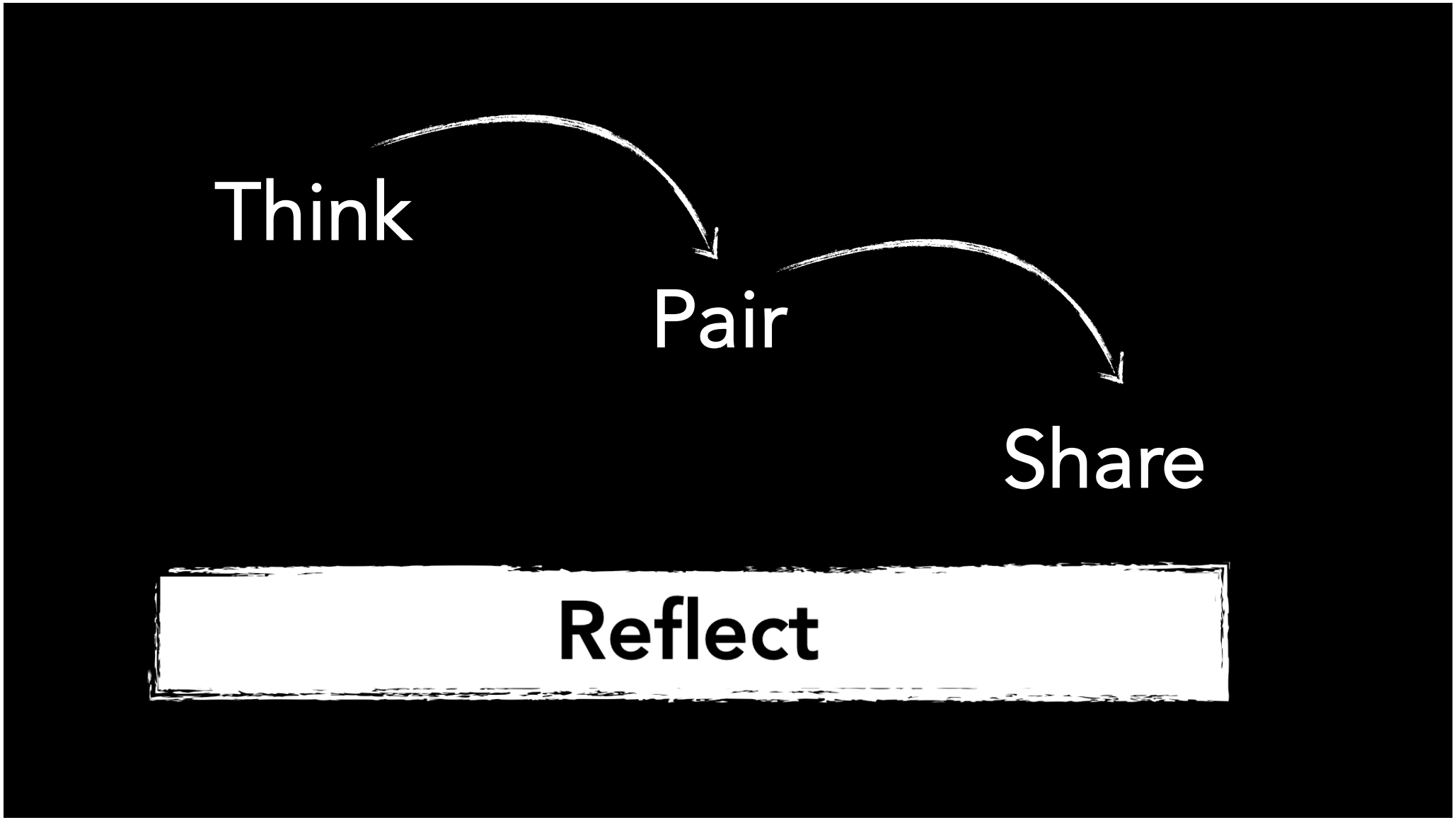
During the Class

- Respect the university guide:
  - Properly wear procedural masks
  - No eating nor drinking (except for water)

- Please protect yourself and others

During the Class

- Speak up when having questions
- Participate in class activities


Think
Pair
Share
Reflect

Before/After the Class

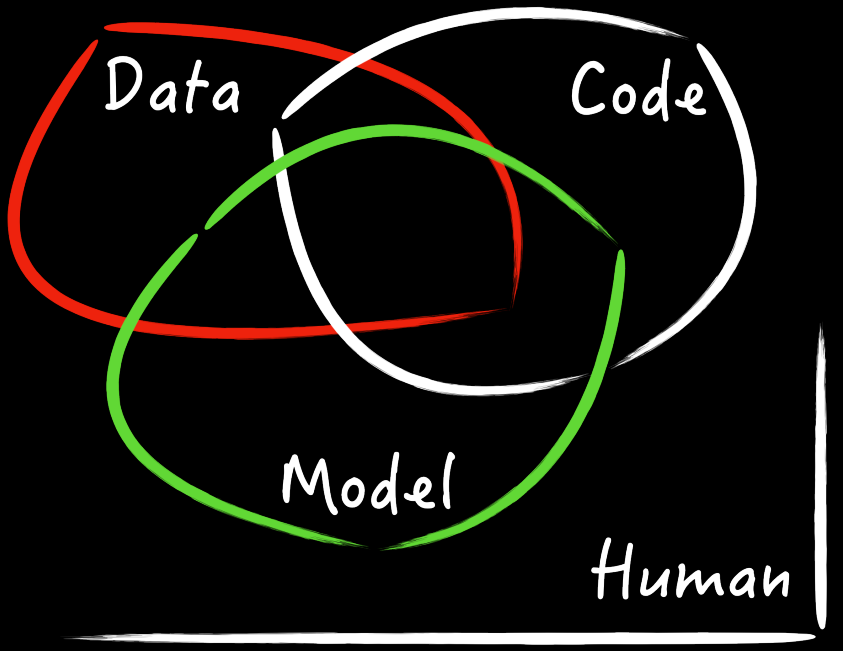
Using Slack (dbis-mcgill-fall2021.slack.com)

- Easiest way to reach out to me, Deeksha (your TA), and your peers;
- Know more about each other;
- Find/discuss common interests;
- Collaborate on assignments and projects.

- Syllabus on GitHub (schedule, slides, links, assignment).

This course is about

- Intelligent Systems
- Design
- Build



Prerequisite

- SE (COMP 303, COMP 361, ECSE 321, ECSE 326, ….)
- AI (COMP 424, COMP 550, COMP 551, ECSE 526, …)
- Design (ECSE 424, GLIS 627, GLIS 626, …)
- Academic/Project Background survey (later this week)

Who Are We

- Jin Guo
- Deeksha Arya

Activity 1

Think about one of your past project related to either SE, AI, or Design:

- Describe the problem you were aiming to address;
- Describe the biggest challenges you have faced on this project.

1. For small groups with people around you;
2. Introduce yourself to your group;
3. Find three common things among your group;
4. Share your descriptions to the questions on the left to your group.

Schedule (Tentative)

1	02-Sep	Intro	14	21-Oct	Focus: Design for Learning
2	07-Sep	Intro for Modern SE	15	26-Oct	Focus: Design for Decision-making
3	09-Sep	History of AI	16	28-Oct	Fcous: Design for Creativity
4	14-Sep	Model Selection, Evaluation and Documentation	17	02-Nov	Focus: Inclusive Design for AI
5	16-Sep	From Model to System	18	04-Nov	AI principles Overview
6	21-Sep	Data Acquisition & Management	19	09-Nov	AI Principles: Safety
7	23-Sep	Requirement for (and) AI	20	11-Nov	AI Principles: Security and Privacy
8	28-Sep	Team and Collaboration	21	16-Nov	AI Principles: Accoutability/Auditing
9	20-Sep	Team and Collaboration	22	18-Nov	AI Principles: Explanability
10	05-Oct	Quality Assessment	23	23-Nov	AI Principles: Fairness
11	07-Oct	Infrastucture, Deployment and Operation	24	25-Nov	AI Principles: Fairness
12	15-Oct	Design for Human-AI Interaction (UX)	25	30-Nov	Value in AI Design
13	19-Oct	Design for Human-AI Interaction (Data Visualization and Communication)	26	02-Dec	Presentation

Assessment

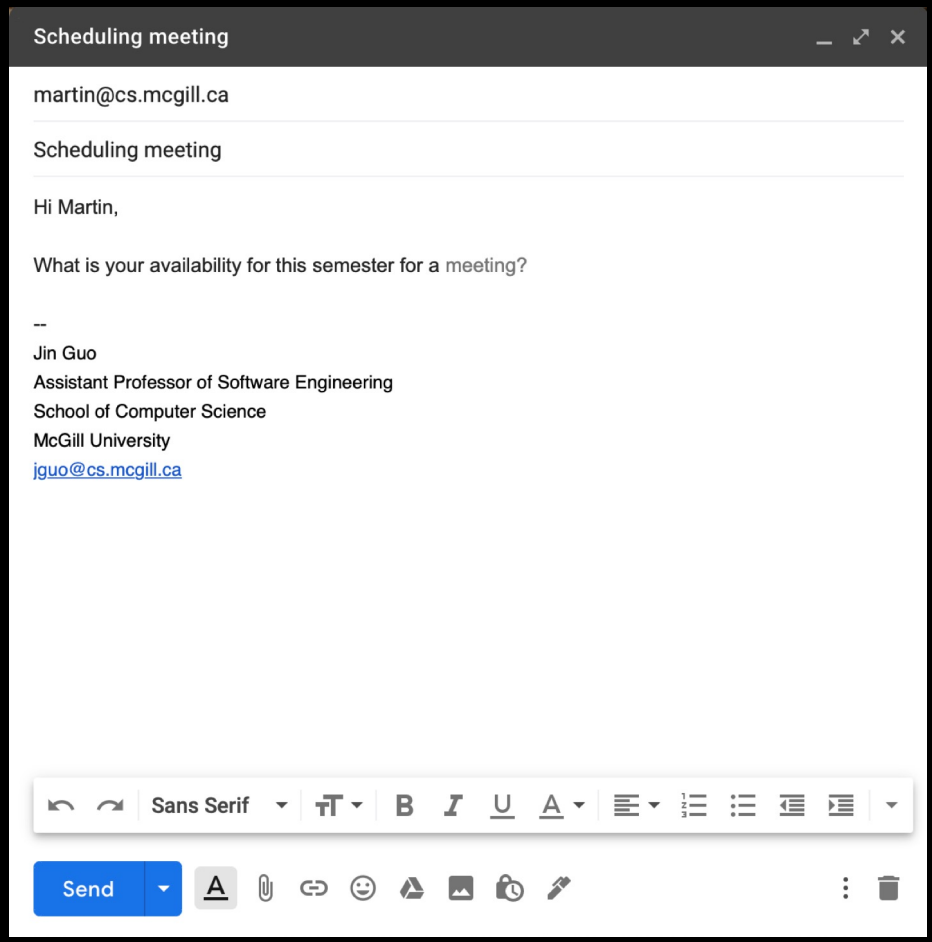
Focus on collaborative learning

- Participation 10% (select project to present/lead the discussion)
- Assignment 60% (individual assignment and peer review)
- Team project 30% (group of 3-4 people with different background)

Activity 2

Email auto completion/compose

- What would you consider "intelligence" in this context?
- What information might be useful to help you achieve the intelligence?
- How do you know you have achieved the intelligence?
- What might be the challenges that prevent you from achieving such intelligence?



https://ai.googleblog.com/2018/05/smart-compose-using-neural-networks-to.html

See you next week!