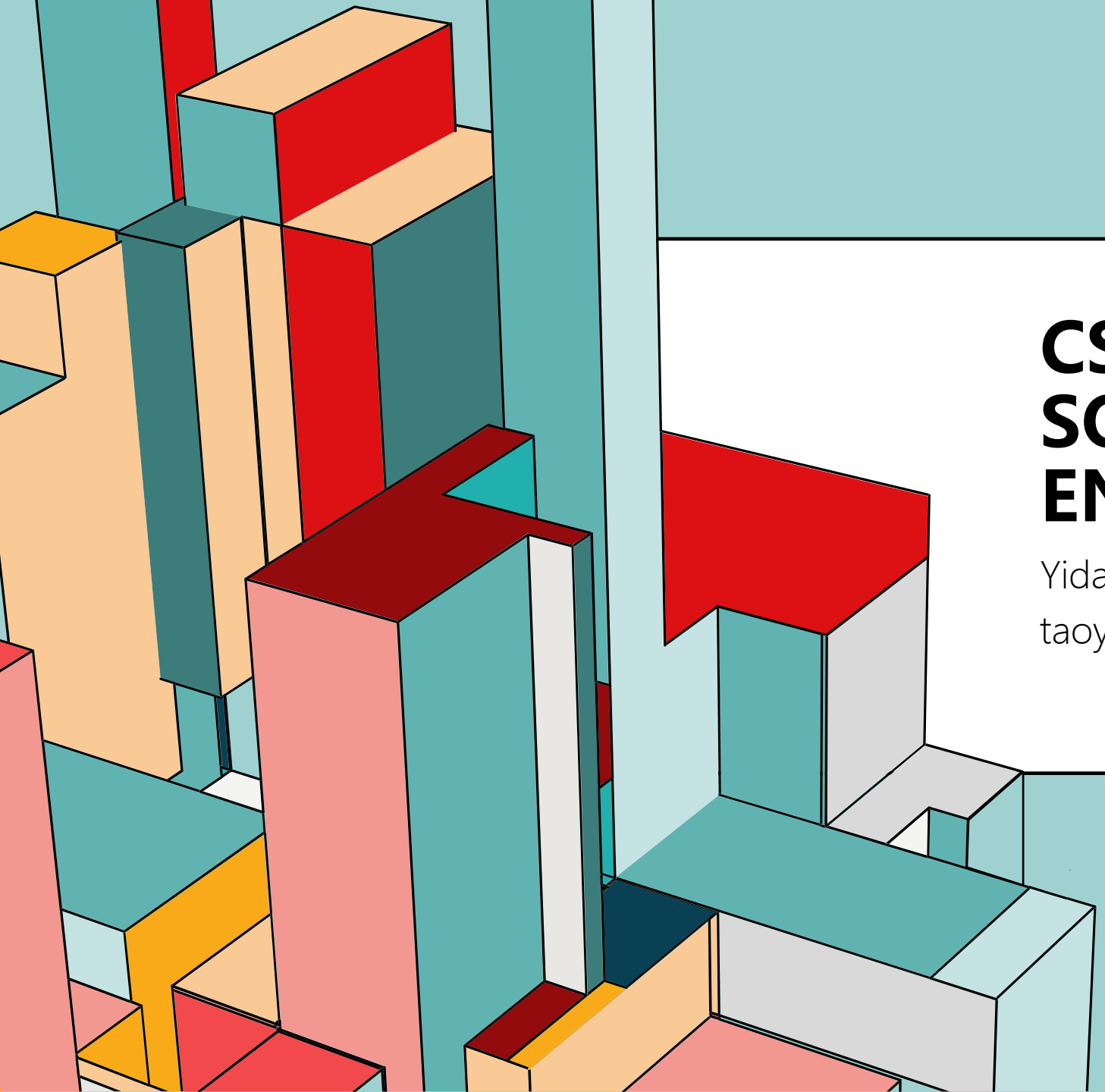


CS304 SOFTWARE ENGINEERING

Yida Tao

taoyd@sustech.edu.cn

COURSE WEBSITE

Sakai: CS304-23S-01班, CS304-23S-02班

You'll be added to the enrolled class.

All course resources (slides, notifications, etc.) will be uploaded here.

GitHub Classroom:

Team projects, milestones, and some of the lab practices will be released and submitted here. Details later.

https://classroom.github.com/classrooms/120698141-sustech-cs304-classroom-23spring

COURSE TEAM - LECTURE 02

Lecturer: 陶伊达, taoyd@sustech.edu.cn

Lab tutor: 田蕾, tianl3@mail.sustech.edu.cn

理论课 （1-16周）(QQ群：481912450)

周一 7-8节 三教208

实验课 （1-16周）

实验1组　周四上午3-4节　三教502　SA：徐驰、何泽安　　QQ群：652452937
实验2组　周三上午3-4节　三教510　SA：黄硕、谭荔丹　　QQ群：442175402
实验3组　周二下午5-6节　三教502　SA：魏田纭溪、谭雅静QQ群：495154134

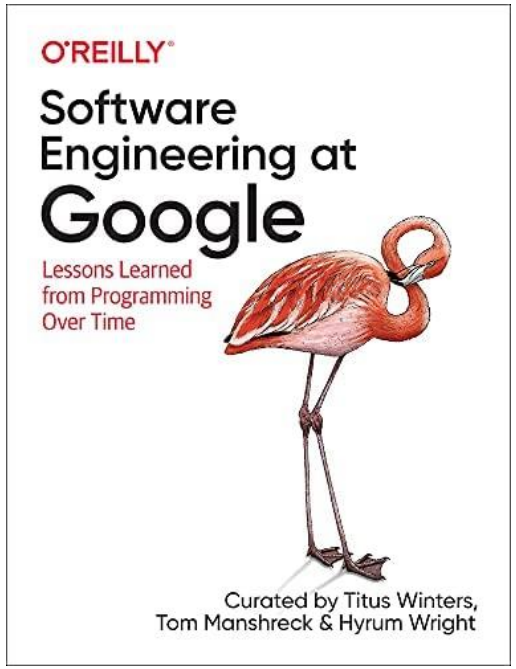
COURSE THEMES

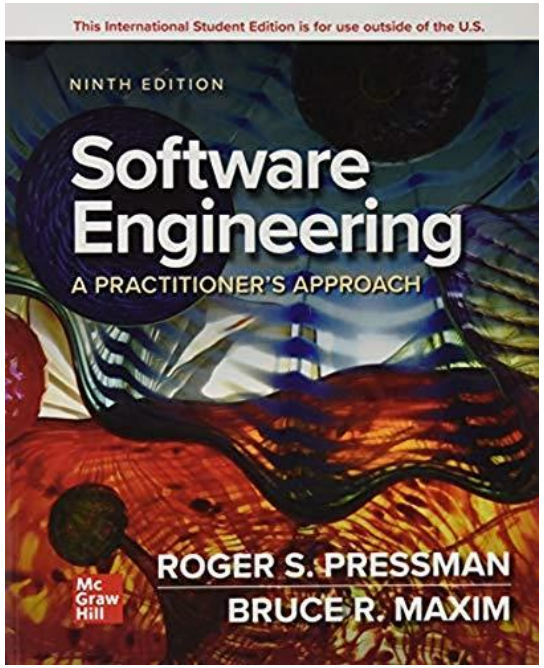
The themes may change as the course progresses.

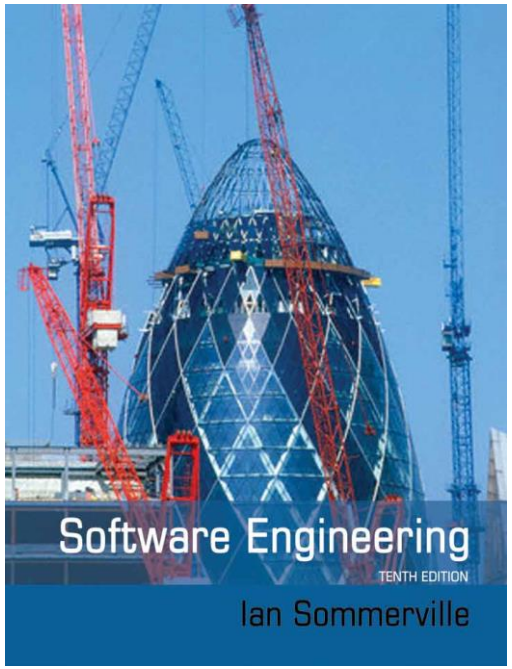
1. Intro to Software Engineering
2. Software Process
3. Version Control & Build Systems
4. Requirement Engineering
5. Software Design & Architecture
6. Software Quality & Metrics
7. Code Review
8. Software Evolution & Maintenance
9. Software Testing
10. Software Documentation
11. Service-based Software Engineering
12. Dependency Management
13. Software Security & Reliability
14. AI in Software Engineering

TEXTBOOK

There is no single textbook, but you may find the following books useful

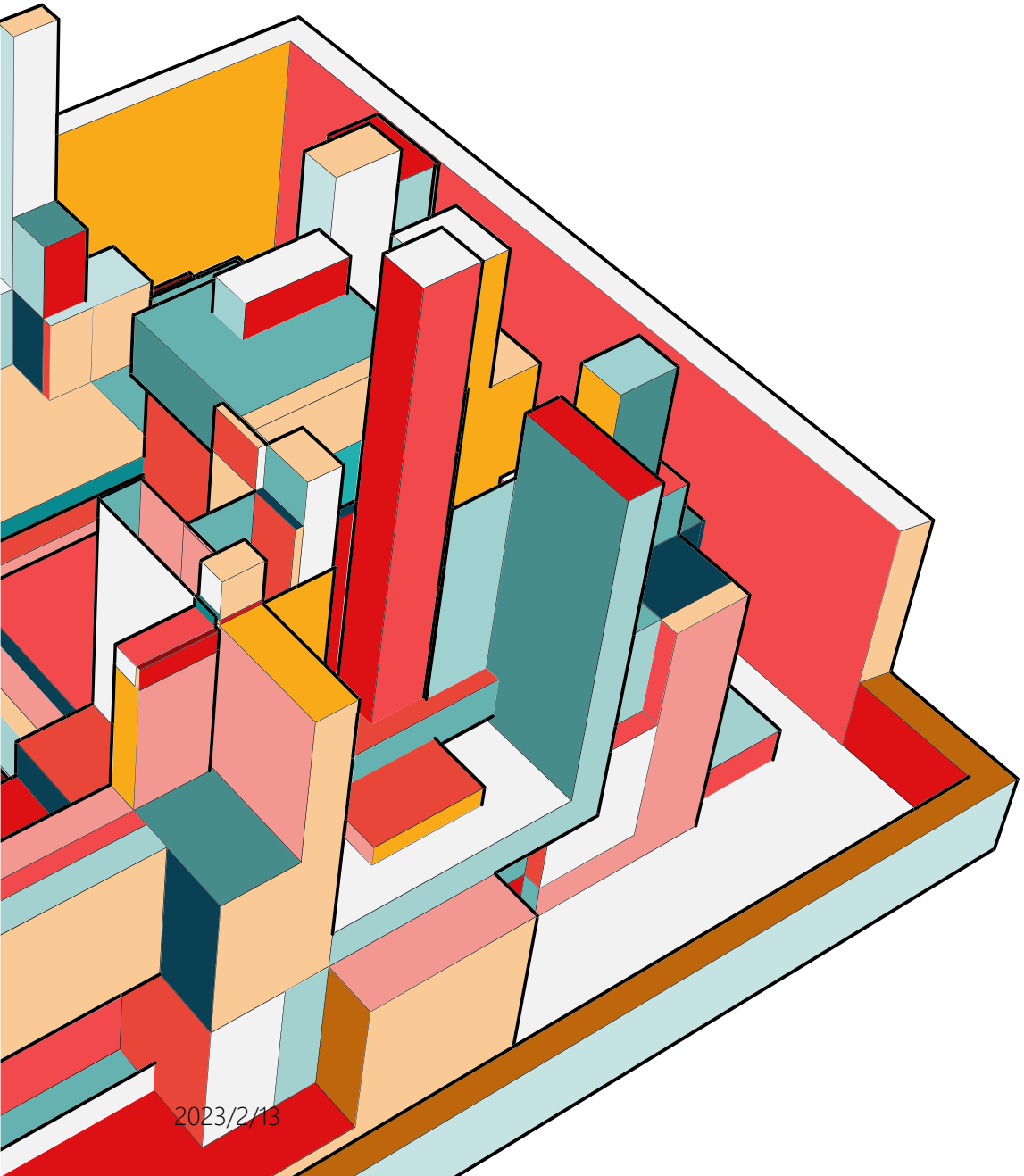






THIS IS NOT A PROGRAMMING COURSE

BUT YOU WILL DO A LOT OF PROGRAMMING THROUGHOUT THE COURSE ☺

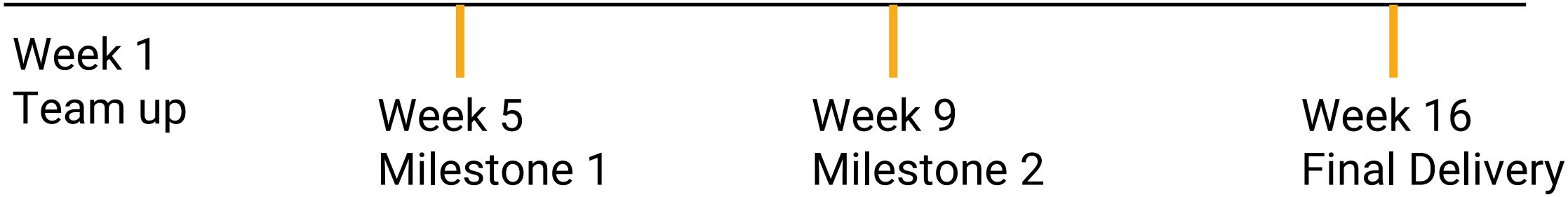


LAB PRACTICES

- Practical small tasks
- Mostly done by individuals
- Preferably finished onsite

TEAM PROJECT

- Large-scale projects that mirror realistic settings
- Work in a fixed team of 4-5 people throughout the semester
- 3 milestones, each with reports, deliverables, and presentations



ALL team members should show up during each presentation.

尽量不跨班组队；跨班的话必须对应<=2实验老师

TEAM PROJECT - CATEGORY 1

Boost Personal Study Productivity

- Clients: university students
- Goal: Software that boosts students' productivity and help them study more effectively and efficiently.
- Examples:
  - Tools to improve coding efficiency for CS students
  - Tools to improve the quality of your source code
  - More delightful & enjoyable coding environment
  - Tools to manage workflow & fight procrastination

TEAM PROJECT - CATEGORY 2

Empower CS department

- Clients: staffs of our CS department
- Goal: Software that improves routine workflow and automates error-prone manual process
- Examples:
  - CS funding management system (Real requirements. Please register in this form if you want to select this project.) https://docs.qq.com/sheet/DT2laWHN0Y1FDUVZu?tab=BB08J2

TEAM PROJECT - CATEGORY 3

Empower SUSTech

- Clients: student unions, interest groups, staffs and faculties of SUSTech
- Goal: Software that help clients' real needs.
- Examples:
  - Better dining @SUSTech (clients: every SUSTech members)
  - SUSTech e-learning center (clients: students and faculties)
  - SUSTech virtual assistant / virtual tour guide (with ChatGPT?) (clients: visitors, high-school students and their families that are interested in SUSTech)
- Tips: Above are only examples. Your team should identify real clients and their real needs. Better talk to clients face to face if possible.

TEAM PROJECT

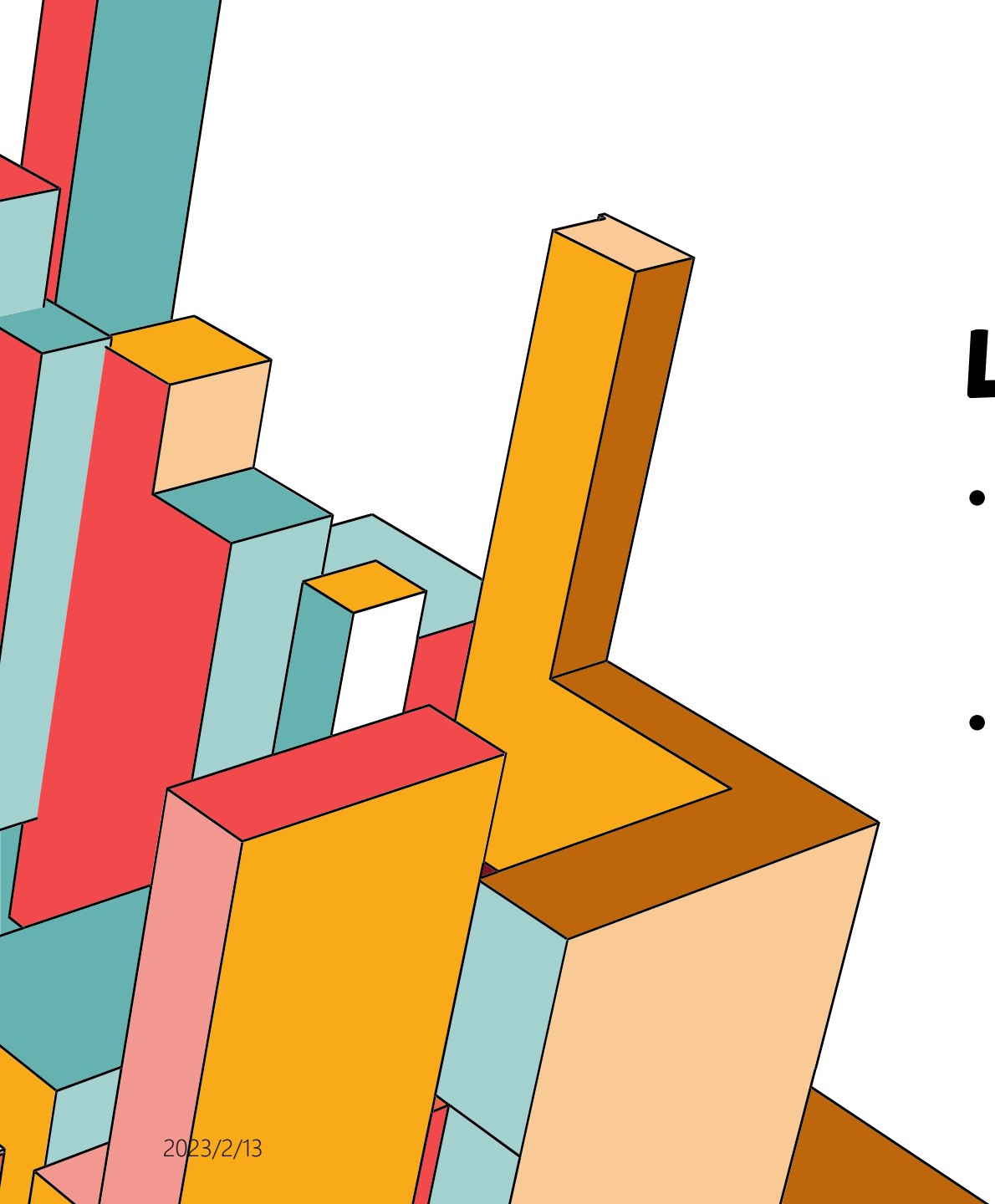
You are also encouraged to propose other interesting projects, within these 3 categories

Projects should be practical, executable, usable, and have a clear set of target/real users. Contact us if you're not sure.

More details on Lab 1

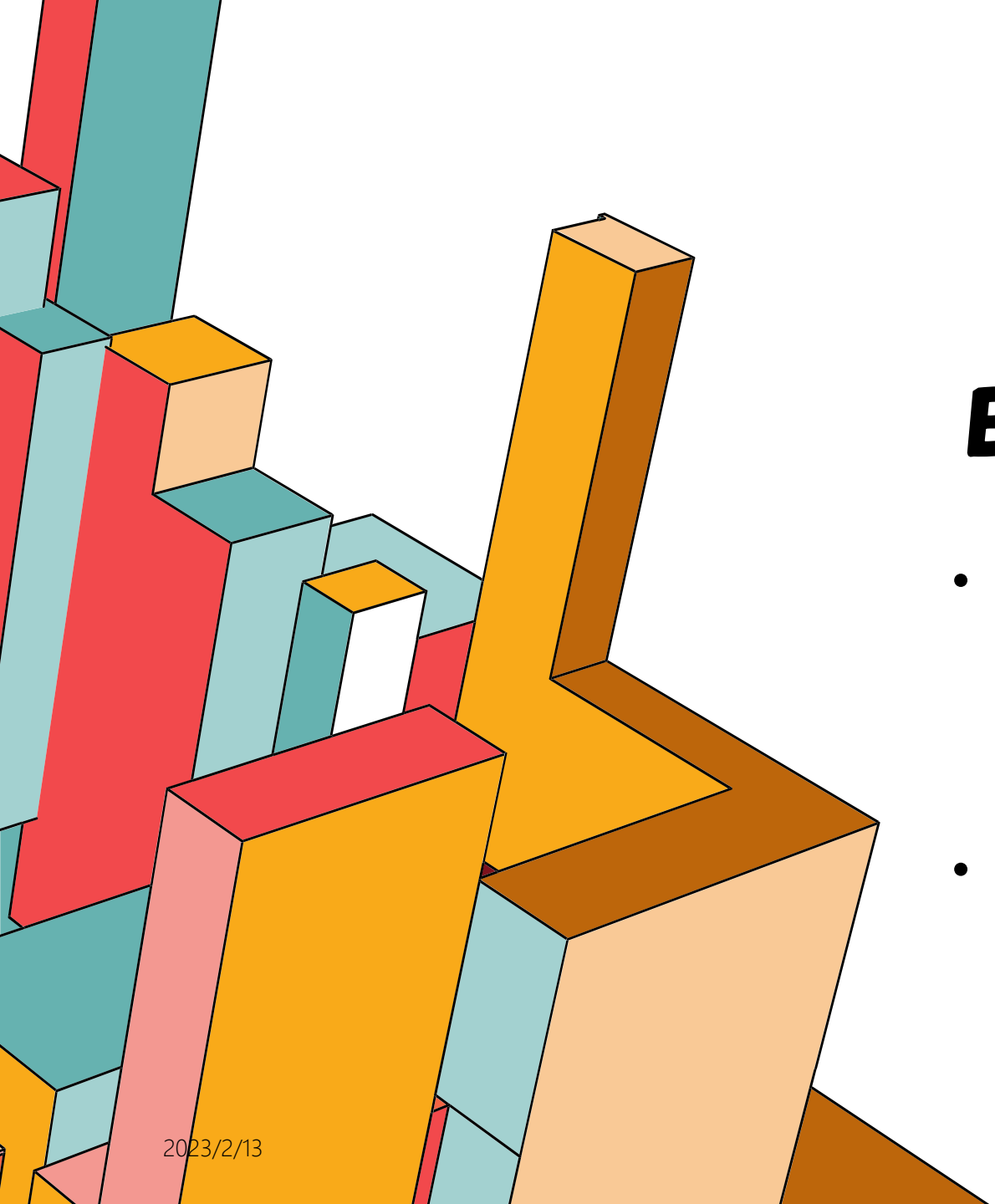
EVALUATION

Lab (attendance + practices)	20%
Team Project - Milestone 1: 10% - Milestone 2: 15% - Final delivery: 25%	50%
Final Exam	30%



LATE DAY POLICY

- Lab practices
  - 20% penalty after the deadline
- Project milestones
  - No late day for presentations
  - 40% penalty for late submissions of report & deliverables



BONUS

- Team project (details in project description)
  - Early submission at week 15: +0.5
  - Demo at week 16 lecture: +1 max
  - Extra contribution: +2 max
- Individual academic talk +2 max

INDIVIDUAL ACADEMIC TALK

SEND ME AN EMAIL ASAP TO SIGN UP!

- During week 15 lecture, we'll have a sharing session, featuring 5-6 individual academic talk
- In this talk, you can introduce any topics in Software Engineering that you are interested in.
- You'll prepare a 10-15 min talk, introducing the background, the state-of-the-art techniques & tools, limitations, and the future work of the selected topic

INDIVIDUAL ACADEMIC TALK

SEND ME AN EMAIL ASAP TO SIGN UP!

- You could choose topics covered in lectures, but your talk should be different from our course slides & lectures.
- You should submit your slides on week 14 for review; Unqualified slides won’t be allowed to be presented at week 15.

ACADEMIC INTEGRITY

From Spring 2022, the plagiarism policy applied by the Computer Science and Engineering department is the following:

*** If an undergraduate assignment is found to be plagiarized, the first time the score of the assignment will be 0.**

*** The second time the score of the course will be 0.**

*** If a student does not sign the Assignment Declaration Form or cheats in the course, including regular assignments, midterms, final exams, etc., in addition to the grade penalty, the student will not be allowed to enroll in the two CS majors through 1+3, and cannot receive any recommendation for postgraduate admission exam exemption and all other academic awards.**

As it may be difficult when two assignments are identical or nearly identical who actually wrote it, the policy will apply to BOTH students, unless one confesses having copied without the knowledge of the other.

南方科技大学 SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY | 计算机科学与工程系 Department of Computer Science and Engineering

本科生作业承诺书

本人_____（学号_____）本学期已选修计算机科学与工程系_____课程。本人已阅读并了解《南方科技大学计算机科学与工程系本科生作业抄袭学术不端行为的认定标准及处理办法》制度中关于禁止本科生作业抄袭的相关规定，并承诺自觉遵守其规定。

承诺人：

年　　月　　日

Please submit the form before the end of the course selection & drop period!

NEXT

Introduction to Software Engineering