

EECS 22L: Software Engineering Project in C Language Project 1



Outline

- Your TAs
- Introduction
- Discussion & Lab
- Chess
 - How to play Chess?
 - Chess Project
 - Commercial Chess vs Students Implemented Chess
- User Specification
- Features of the Chess Project
- Competitive chess tournament
- First Submission

TAs

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| 18022 | Dis | A2 | 0 | STAFF DOEMER, R. | Th 1:00- 1:50p | PCB 1300 | 45 | 9 | n/a | 8 | Bookstore | OPEN |
| 18023 | Dis | A3 | 0 | STAFF DOEMER, R. | F 11:00-11:50 | PCB 1300 | 45 | 21 | n/a | 19 | Bookstore | OPEN |
| 18033 | Lab | 3A | 0 | STAFF DOEMER, R. | W 11:00- 1:50p | PCB 1300 | 45 | 27 | n/a | 28 | Bookstore | OPEN |
| 18034 | Lab | 4A | 0 | STAFF DOEMER, R. | W 2:00- 4:50p | PCB 1300 | 45 | 12 | n/a | 12 | Bookstore | OPEN |

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|-------|-----|----|---|---------------------|----------------|--------------------------|----|----|-----|----|---------------------------|-------------|
| 18021 | Dis | A1 | 0 | STAFF DOEMER, R. | Tu 1:00- 1:50p | PCB 1300 | 45 | 35 | n/a | 37 | Bookstore | OPEN |
| 18024 | Dis | A4 | 0 | STAFF DOEMER, R. | F 12:00-12:50p | PCB 1300 | 45 | 9 | n/a | 10 | Bookstore | OPEN |
| 18031 | Lab | 1A | 0 | STAFF DOEMER, R. | Tu 2:00- 4:50p | ELH 110 | 45 | 24 | n/a | 23 | Bookstore | OPEN |
| 18032 | Lab | 2A | 0 | STAFF DOEMER, R. | Tu 5:00- 7:50p | ELH 110 | 45 | 11 | n/a | 11 | Bookstore | OPEN |

Introduction

Team Work

- Projects will be performed by student teams
- teams of 7 students
- Project 1: Chess
- Project 2: TBD

- **Team work is an essential aspect of this class!**
- Every student needs to contribute to the team effort!
- Tasks may be assigned to individual team members, but **all members share the responsibility** for deliverables

Collaboration

- Team meeting **at least** once a week
- Dedicated team account on the server
 - Accounts information are provided to you by TAs after grouping
 - Name tags
- Share code, data, and documents (within your team only!)

Competition

- Teams compete for extra credit on **February 3rd**

Discussion & Lab

Discussion (~1 hour)

- Demonstrations of new tools or libraries
- Project explanation
- Team discussion the team preference of software features
- Design the architecture of the program
- Decide the implementation details
- Design the testing plan

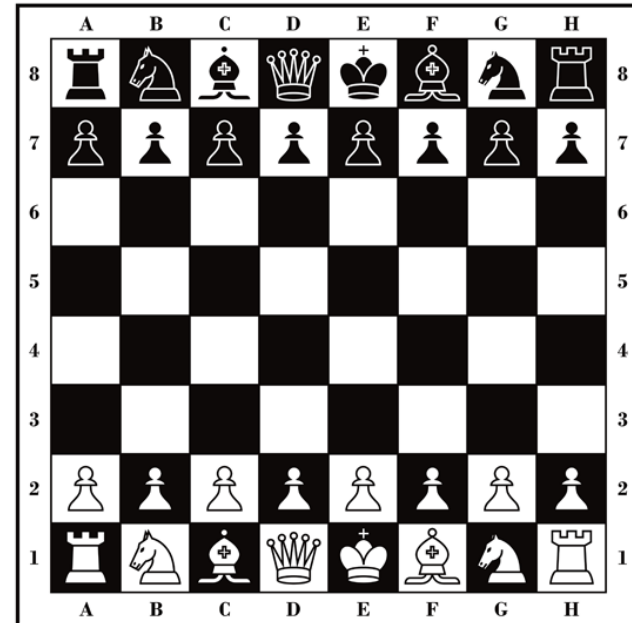
Lab (~3 hours)

- Continue the team work in the discussion sessions
- Writing the documentations
- Implementing the software program

Attendance is mandatory for the sake of team work!!!

Chess

- [Basic rules of chess](#)
- Play Chess
 - www.instantchess.com
 - Student version



User Specification

- Chess Project
 - A chess program that interactively plays against human
- Program Specification
 - Follows the official rules of chess
 - Shows a game interface where the player can see the game board and make moves
 - Interactive player (human user) and an automatic player (computer)
 - The human user chooses the side to play
 - white or black
 - Keeps a human readable log of all the moves (in a text file)
 - Computer player makes its moves in reasonable time (less than 1 minute per move)



User Specification

- Advanced options that are desirable (but optional): (Bonus)
 - The human user can choose to play against a second human user or let the computer play against itself
 - Human player can withdraw previous moves
 - Supports different levels of the computer player
 - beginner, intermediate, and expert
 - Computer player may provide hints on possible good moves to the human player
 - A graphical user interface (GUI)
 - Clocks/timers for both players
 - Take a given board setup and start the game from there
 - Supports the official algebraic notation of chess moves
 - Any other options that make the game more fun to play



Competitive Chess Tournament

- Tournament support
 - A chess tournament all teams
 - Competition will be held on two terminals of two computers in the lab
 - Game is controlled by team member
 - Extra point for the winner



- Hints:
 - The basic functions are sufficient to participate in the tournament
 - An illegal move immediately ends the game !
 - Nice graphics is desirable, but if the computer player makes only dumb moves, it will not earn much credit



First Submission

- Name of the deliverable(s):
 - Chess_UserManual.pdf
- Due date:
 - Jan 12, 12pm (noon)
- [Grading Criteria](#)