

# 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

## Huan Chen(huanc3@uci.edu)

18022	Dis	A2	0	STAFF DOEMER, R.	Tu 5:00- 5:50p	<a href="#">ELH 110</a>	50	20	n/a	21	<a href="#">Bookstore</a>	OPEN
18024	Dis	A4	0	STAFF DOEMER, R.	Th 5:00- 5:50p	<a href="#">ELH 110</a>	50	15	n/a	15	<a href="#">Bookstore</a>	OPEN
18032	Lab	A2	0	STAFF DOEMER, R.	Tu 6:00- 8:50p	<a href="#">ELH 110</a>	50	20	n/a	18	<a href="#">Bookstore</a>	OPEN
18034	Lab	A4	0	STAFF DOEMER, R.	Th 6:00- 8:50p	<a href="#">ELH 110</a>	50	12	n/a	13	<a href="#">Bookstore</a>	OPEN

## Delaram Amiri(damiri@uci.edu)

18021	Dis	A1	0	STAFF DOEMER, R.	Tu 5:00- 5:50p	<a href="#">DBH 1200</a>	50	29	n/a	30	<a href="#">Bookstore</a>	OPEN
18023	Dis	A3	0	STAFF DOEMER, R.	Th 5:00- 5:50p	<a href="#">DBH 1200</a>	50	18	n/a	21	<a href="#">Bookstore</a>	OPEN
18031	Lab	A1	0	STAFF DOEMER, R.	Tu 6:00- 8:50p	<a href="#">DBH 1200</a>	50	31	n/a	27	<a href="#">Bookstore</a>	OPEN
18033	Lab	A3	0	STAFF DOEMER, R.	Th 6:00- 8:50p	<a href="#">DBH 1200</a>	50	19	n/a	18	<a href="#">Bookstore</a>	OPEN

# Introduction

## Team Work

- Projects will be performed by student teams
- teams of 4-6 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 7th**

# 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

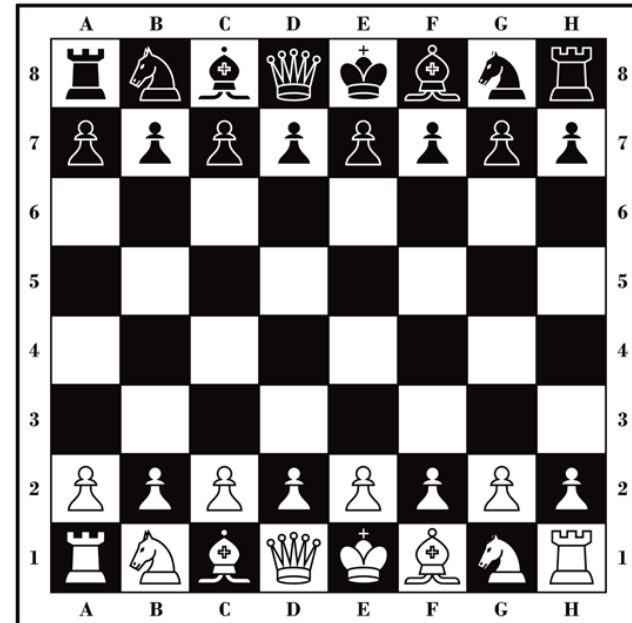
## Lab (~3 hours)

- 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](http://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 16, 12pm (noon)
- Grading Criteria