6.110 Computer Language Engineering

Course Information

February 3, 2025

TAs



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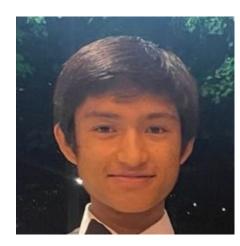
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6110-sp25.github.io

Resources

Course website

Piazza

Used for Q&A and announcements.

Gradescope

Used for quizzes and weekly participation.

GitHub organization (on github.com)

· Hosts class tools and project repos.

Compiler project (75%)

Compiler for *Decaf*, which is a subset of C.

Split into 5 phases, 2–3 weeks each.

- 1.lexing + parsing
- 2.internal representation + semantics
- 3.code generation
- 4.dataflow analysis
- 5.register allocation + optimizations

Phase 1 individual, phases 2–5 in groups of 3–4.

Phase 1 will be released Friday, February 7.

Class meetings

MWF 11–12 and TR 12–1 in 32-124.

- Mondays to Thursdays will be lectures.
- Fridays will be recitations (focus on projects).

Towards end of each project phase, there will be few/no lectures.

Check the class schedule regularly.

Re-lectures

If you are unable to attend lectures, we plan to offer weekly **re-lectures**, a condensed version of the whole week's lectures.

We are mostly reusing **re-lecture recordings** from last year unless syllabus changes. Feel free to come to OH if you have questions.

Quizzes (20%)

Two quizzes, each worth 10%. Quizzes will be during class time on Friday, March 14, and Friday, May 2.

Participation (5%)

Weekly check-in forms

- We'll ask about your progress on the project
- This is to help you stay on track

"Mini-quizzes"

- Cover lecture content
- Graded on completion, for you to check your understanding

Grading

Max of the following two options

Phase 1	5%
Phase 2	5%
Phase 3	15%
Phase 4	10%
Phase 5	40%
Quiz 1	10%
Quiz 2	10%
Participation	5%

Phase 5 (final project + report, cumulative of all phases)	75%
Quiz 1	10%
Quiz 2	10%
Participation	5%

We **STRONGLY ENCOURAGE** you to follow through phases 1–4

Office Hours

Wed 4–6 pm

Location TBD

Extra OH on weeks with phases due:

- Thurs 4–6 pm
- Fri 2–7 pm

Collaboration policy

Allowed:

- Discussing high-level approaches to the project
- Reference material, libraries, etc. available online, as long as they don't trivialize the project
- Using LLMs to generate code
- Collaboration on miniquizzes (but write solutions individually)

Not allowed:

- Sharing code with other teams
- Posting project code or miniquiz solutions in a publicly accessible location, including public GitHub repositories.

LLM policy

- •Usage of LLMs will have no effect, either positive or negative, on your grade.
- You are encouraged to try to use LLMs to generate code in your project.
- •If you use LLMs, please explain your approach to using LLMs in project reports.
- Document your use of LLMs in LLM code usage surveys, due two days after each project phase deadline.

Coming up soon:

First check-in form (more of a survey) is up on Gradescope.

• Due Thursday, February 6. We will add you to the GitHub organization after submission

Phase 1 (lexing + parsing) of the project will be released Friday, February 7.

Coming up soon:

Mon 2/3	Tue 2/4	Wed 2/5	Thu 2/6	Fri 2/7
Lecture Introduction	Lecture Regular expressions	Lecture	Lecture	Recitation Project setup and overview
			Weekly check-in form 1 due	Project phase 1 release