

COMP 3550

1.1 WELCOME & COURSE OVERVIEW

Week 1: Software Development
Models & Agile Mindset

WELCOME TO COMP 3350

Software Engineering

I am your video lecture host: Lauren

Classroom Format: flipped classroom

- First, videos = lecture
- Second, class = active work time, team building, & important lessons

Reminder that this is **Software Engineering I**, not just *coding*

COURSE GOALS

Build a real project, in a real team,
solving a real problem

Learn how professional developers
and teams plan, design, test, and
iterate software



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COURSE GOALS

- **How to work with others** — through teamwork, conflict, and accountability
- **How to manage yourself** — through work styles, deadlines, feedback, and real consequences
- **How to build something real** — and grow from the experience



WHAT'S DIFFERENT ABOUT THIS COURSE

- Learning when to ask for help — and when to persevere
- Navigating conflict and standing up for yourself
- Balancing teamwork with individual responsibility
- Adapting to different work styles
- Managing deadlines that don't move
- Understanding that code quality matters
- Gaining all this through building a real product — not just lectures or exercises

WEEKLY FLOW

1. Watch videos before class
2. Come to class ready to engage with your group members, me, and the material
3. Use GitLab
 - a. once your project gets going I **strongly recommend** a check-in minimum, once a day.

YOUR TOOLBOX

- Depends on the project specifications of the term for some of these but generally:
- Follow the project overview document. It tells you
 - IDEs
 - testing frameworks
 - versioning
 - (and more)
- For sure using: GitLab, UMLearn

PROJECT EVALUATION OVERVIEW

- Iterations (4 total):
 - I0: non-technical/project planning
 - I1: project basics, unit testing
 - I2: enhancing project, tech debt payback, integration testing, database
 - I3: enhancing project, tech debt payback, acceptance testing
- Final project presentation
 - Static website and fun demo videos
- Peer review
 - reflecting on your own work and your teammates
 - important part of the project process
 - more on this and the process for it later

WANT TO GET AHEAD?

- Git Primer Video
 - Make your account & request access to the class group
- Mess around in GitLab
- Learn about Markdown

ADVICE FROM FORMER STUDENTS

- At the end of each year I ask students for something they wish they had known at the start of the term.
- Sometimes they say things that I am **100%** sure I told them at the beginning of the term but apparently they ignored me.
- Now, in an effort to curb this slightly, I have decided to include stuff in their own words....

REFLECTIONS OF STUDENTS PAST

Be careful creating tech debt while thinking "oh well I'll fix this later hahaha no problem!" The extra time it takes to write better code is almost always worth it. You're going to spend so much time refactoring the junky code you wrote at 3am otherwise (a lesson I've learned the hard way :-).

This is not your normal class project. Take their word for it

REFLECTIONS OF STUDENTS PAST

Stop making everything so tightly coupled, and plan how we want different classes to interact more sufficiently. These choices plagued us every iteration, and if we'd taken more time to look at the coupling between our classes early on, we would've saved time in the long run.

Your early choices will follow you in this project. Spend time on making good ones

REFLECTIONS OF STUDENTS PAST

I wish i'd known that the course requires a lot of time.

I hate to say "I told you so"...

REFLECTIONS OF STUDENTS PAST

Nail down your interfaces and architecture before writing any code, especially in the beginning.

We were stepping on each other's toes like crazy.

Planning Time Upfront in class? USE IT.

REFLECTIONS OF STUDENTS PAST

A piece of advice I wish I had known would have been to document more than we already had. Document everything! You will forget things to do, that pieces exist, and why decisions were made. We didn't necessarily struggle only because of this but it might have helped and I would have loved to see more thorough documentation of the smaller decisions we made along the way.

When Lauren recommends documenting something, she means it

REFLECTIONS OF STUDENTS PAST

I wish I had known how difficult it was to work in one IDE I switch your project over to use a different one.

If I give you versions and software requirements, use it.

REFLECTIONS OF STUDENTS PAST

As hard as this course will be, everything you learn here will be invaluable.

I put this course off for too long. If I had this knowledge before my last job it would have made things so much better.

Not to get too sappy but...



LET'S GET STARTED