

CS 398: Application Development

Week 05 Lecture: Infrastructure

Building applications

Return to Campus!

Classes will be in-person starting Mon Feb 7th.

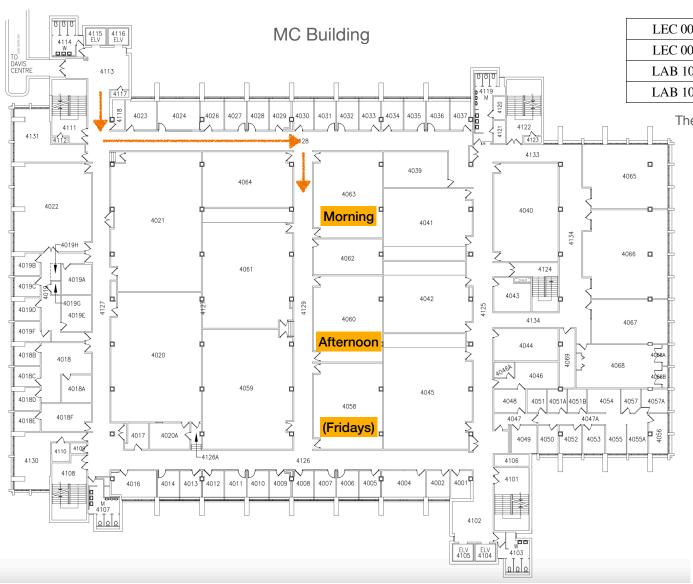
- Videos and slides will still be posted online.
- In-person classes replace these working lectures.

Your team is allowed to mix in-person and remote attendance.

- You can call in to the meeting but you MUST coordinate with your team ahead-of-time.
- Please plan for most of your team to attend course staff will be here to help.

Rules for attending in-person classes.

- 1. You must wear a mask.
 - https://uwaterloo.ca/coronavirus/return/masks-or-other-face-coverings-are-required-campus
- 2. If you believe you should be exempted for medical or other reasons, you MUST request an accommodation through AAS <u>ahead of time</u>.
 - https://uwaterloo.ca/coronavirus/sites/ca.coronavirus/files/uploads/files/ face covering exemption request verification form.pdf



LEC 001	10:30-11:20MW	MC 4063
LEC 002	02:30-03:20MW	MC 4060
LAB 101	10:30-12:20F	MC 4058
LAB 102	02:30-04:20F	MC 4058

These are the assigned classrooms in Quest.

Video Lectures This Week

Goal: Get everything setup for Sprint 1 kickoff on Monday

Lectures This Week

• Mon: Git, Branching, Collaboration

• Wed: Gradle, Build Systems



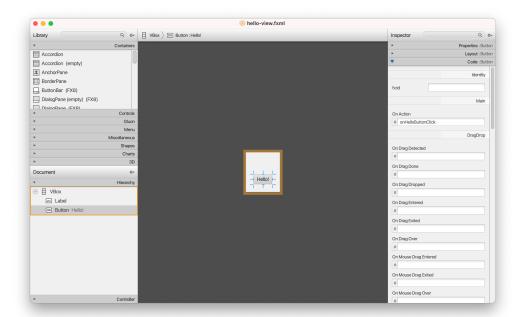
• Fri: Building desktop applications OR Building mobile applications (not on quiz!)

Lectures Next Week

Unit testing, Refactoring

Building Applications

- Watch either desktop (JavaFX) or mobile (Android).
 - Videos presents one toolkit for each platform BUT you can whatever you want! e.g. Swing, JetPack Compose, Compose Desktop.
 - Choice of toolkit is a technical/architectural decision for you to make.
 - My "suggestion" is the toolkits in the videos.
- I added a second desktop video this morning on SceneBuilder.
 - Also a JavaFX project under the CS 346 Template repository.



Activities This Week



Setup GitLab

- All requirements logged in Git and unassigned.
- Milestones (sprints) setup.
- Infrastructure tasks closed.





Source code

- Starting project committed to Git repo.
- Git works across all machines. Everyone has a git client, and knows how to git pull/push.
- IntelliJ is setup for everyone, and the starting project builds.



Technical Investigation

- Choose toolkits; investigate libraries
- Think about data format! How will you store, represent this data?
- Critical technical decisions are made (as much as possible).

Sprint 1 Planning: Agenda

Monday in-class

- Jeff will explain what you should do, and provide some guidance.
- You will meet as a team and decide what to include in Sprint 1.
- If you are remote, arrange with your team ahead of time! Someone should be present with a notebook.

Two-pass algorithm to determine what is in scope:

- 1. For each item in the product backlog:
 - Assign a priority relative to this sprint (high=yes, med=maybe, low=no).
 - How much effort do you think it will take? (high/med/low effort).
- 2. For each item in the product backlog:
 - Sort from high-low priority.
 - Work from the top-down, and assign items until the team runs out of capacity (i.e. time).
 - You will NOT have a good sense of how much you can do in one we want to track time to learn this!