# CSE306 Software Quality in Practice

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Review / Reviews for LPR / How to prepare for LPR / The order of using tools. (about half)

What output/evidence is expected? (several)

Maybe seeing criterion being used in other languages / Tools in other languages (two)

Are there testing programs that mimic human interaction on a website?

How to test AI?

## Reflect a bit on LEX23, addressing these questions:

1. Were the preparations you made for LEX23 appropriate, or would you do something different before part 1 of the LPR?

2. Are you happy with the amount of work you were able to complete during LEX23?

3. Do you have a plan for how to use your remaining time during LEX24?

## 1. Were the preparations you made for LEX23 appropriate, or would you do something different before part 1 of the LPR?

Yes, the process is very similar to the labs we have been doing throughout the whole semester.

I will need to do more preparation by organizing my available resources

I should have brought some notes with me to help with the process and how to invoke some commands.

I would create a schedule with time expected to spend on each component of the lex, as I am not happy with the progress made on lex 23

I think I was well prepared.

I created a sheet with some commands I though were useful, like how to run gdb on Criterion tests, and gprof. I feel like it was lacking in any other information, and I would like to add more to it, specifically when it comes to C syntax.

I don't think I expected the LEX to be like how it was. Having my hand held through most of the LEXs in this course didn't prepare me too much. I think more preparation in terms of remembering C syntax (since we can't google syntax) would help.

I need to prepare more before LPR part 1. I copied down the most important parts of the slides from April 17th, and that was helpful to me, but I need to create a cheat sheet for how to use the different tools. I spent too much time looking through the LEXs during LEX 23.

No, I wasn't used to using the lab computers and I didn't have most of the commands to use the tools memorized.

I went into LEX23 with no preparations and I think that was the part that costed me. I don't think I will make the same mistake in the LPR now that I've learned my lesson. 2. Are you happy with the amount of work you were able to complete during LEX23?

## No - 36/68 (53%) Yes - 20/68 (29%) Didn't address - 12/68 (18%)

3. Do you have a plan for how to use your remaining time during LEX24?

## Yes - 57/68 (84%) No / Not yet / didn't address - 11/68 (16%)

#### TO PLAN



BASIC TOOLS: Trello

ADDITIONAL TOOLS: git

#### TO BUILD A NEW FEATURE



Claim Trello card and move to In Progress. Issues can be used to identify subtasks.

At START create a new branch. Each time you visit a box add/commit/ push evidence of what you did. Also use a meaning commit comment. At FINISH merge branch.

Move Trello card to Done.

FINISH



BASIC TOOLS: compiler, editor, make, criterion, git, gcov, Trello

ADDITIONAL TOOLS: gprof, callgrind, memcheck

#### TO ADDRESS A BUG



Claim Trello card and move to In Progress. Issues can be used to identify subtasks.

At START create a new branch. Each time you visit a box add/commit/ push evidence of what you did. Also use a meaning commit comment. At FINISH merge branch.

Move Trello card to Done.

FINISH



BASIC TOOLS: compiler, editor, make, criterion, git, gdb, Trello

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Are there testing programs that mimic human interaction on a website / GUI ?

- https://developer.android.com/training/ testing/instrumented-tests/ui-tests
- https://docs.oracle.com/en/java/javase/22/ docs/api/java.desktop/java/awt/Robot.html
- <u>https://en.wikipedia.org/wiki/</u>
  <u>Comparison\_of\_GUI\_testing\_tools</u>

https://www.selenium.dev/

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### How to test AI?

- https://deepchecks.com/how-to-test-llmapplications-before-releasing-toproduction/
- https://towardsdatascience.com/testinglarge-language-models-like-we-testsoftware-92745d28a359
- https://www.infoworld.com/article/3714929/
  how-to-test-large-language-models.html

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### How to get a job

Do your homework!



## How to get a job

Do your homework:

Determine expertise needed for different jobs Update your resume: highlight your expertise: don't omit or embellish Find out where/how/when to apply Network - might get your resume looked at Leverage internships, research experiences, etc. Be flexible re: location, industry Talk to student clubs (e.g. resume reviews) Talk to career services Side projects Extracurriculars Be professional Have a plan B (and C, ... )