Debugging Part 2

CS 691 / SWE 699
Fall 2025

GEORGE MASON UNIVERSITY

Logistics

- Lecture 6 reading questions due today at 4:30pm
- NO CLASS NEXT WEEK
- Due 10/16 at 4:30pm:
  - Lecture 7 reading questions
  - Reflection 3
  - Project Proposal

Project proposal

- Two options:
  - Option 1: Investigate a Commercial LLM-Powered Programming Tool
  - Option 2: Build an LLM Powered Programming Tool

- Groups of 1 or 2
- Will give tech talk at end of semester (more details to come)

Today

- In-Class Activity
  - Two tasks debugging in a real open source codebase
- HW (due in two weeks before class)
  - Reflection 3

In-Class Activity

- Goal today: run an **experiment** comparing debugging w/ and w/out Cursor
  - Will get 2 tasks, one without and one with Cursor
  - Work on a real open source codebase
  - Work **individually** rather than in a group
  - Try to make as much progress as you can (but will be graded on your reflection, not your progress on the task)
- Will **only** have class time today to work on the two tasks
  - Will do reflection as HW afterwards
- Use Kaltura to record your screen for all of your programming work, upload video at end of class
- Will get handout describing your task

Schedule for today

- Project setup
- Task 1
  - if finish early, start break
- 10 min break
- Task 2

Project Setup

- Clone the repository git clone https://github.com/weirane/qutebrowser and follow the CONTRIBUTING.md document.
- Install the qutebrowser following the Setup guide.
- Verify that you can run the browser with ./.venv/bin/qutebrowser.
- Verify that you can run the unit tests
- Do not start investigating the bugs yet.
- If you're stuck, **it's ok to ask for help on this step**

Task 1

- Follow instructions on your handout
- Remember to use Kaltura to record all of your programming work
- **Only use an LLM if specified on your handout**

10 min break

Task 2

- Follow instructions on your handout
- Remember to use Kaltura to record all of your programming work
- **Will switch - if using LLM, will switch to not using an LLM; if not using LLM, will use LLM**