Discussion on Vibe Coding with Cursor

17-316/616 Fall 2025

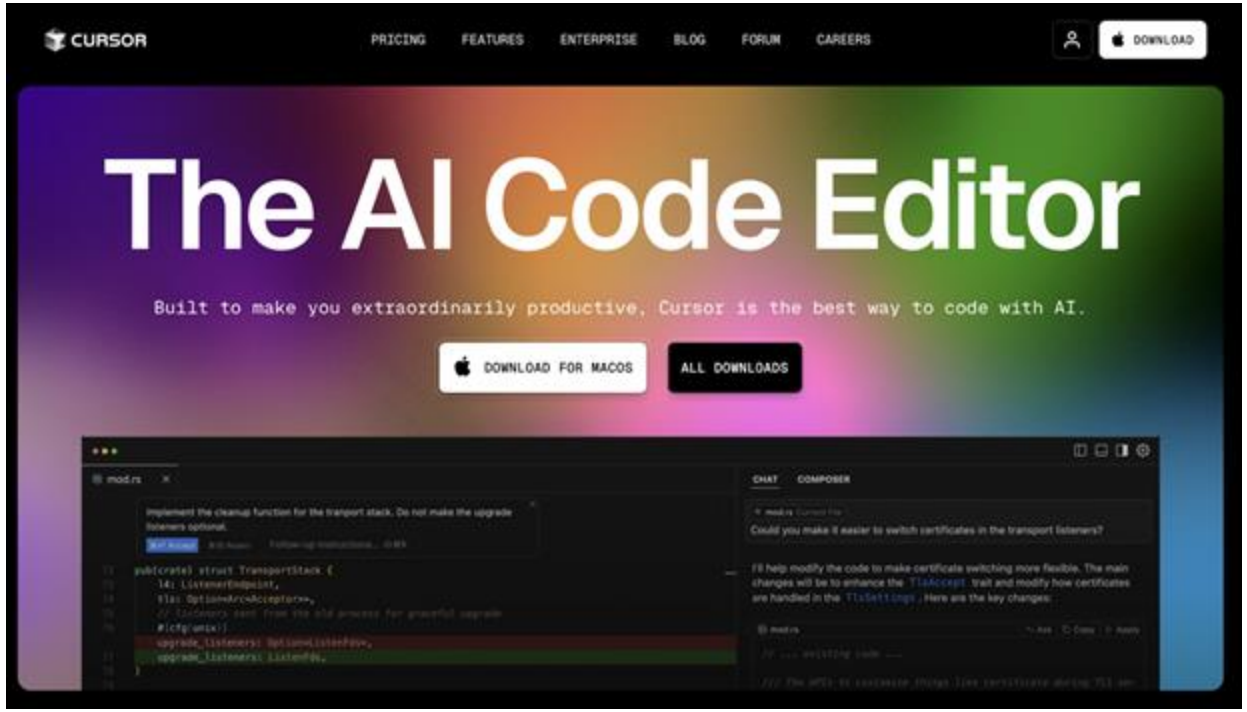
AI Tools for Software Development

https://ai-developer-tools.github.io

Austin Henley and Andrew Begel

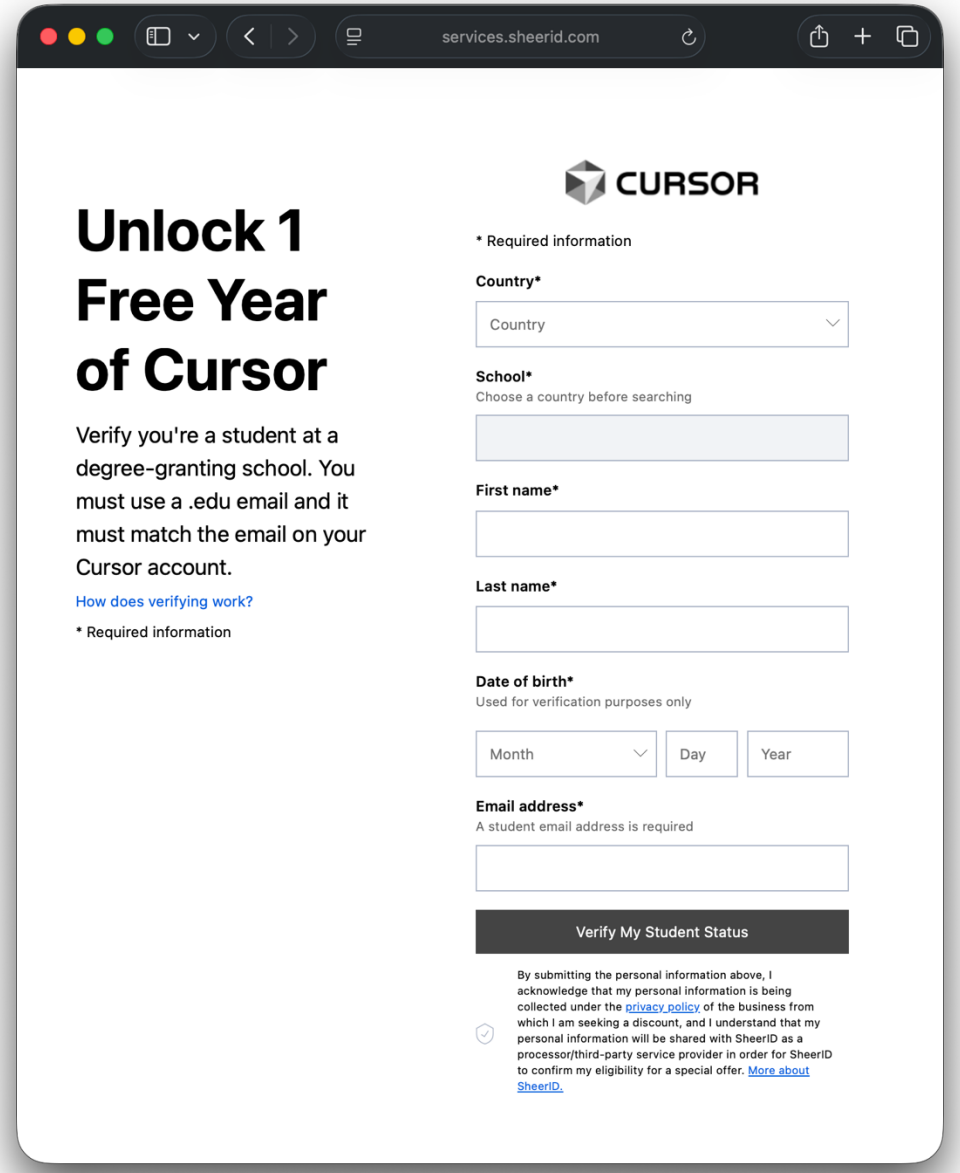
New students

- https://cursor.com
- Make a free Cursor account
- Download and install Cursor
- Also join Slack!
- Check out the course website



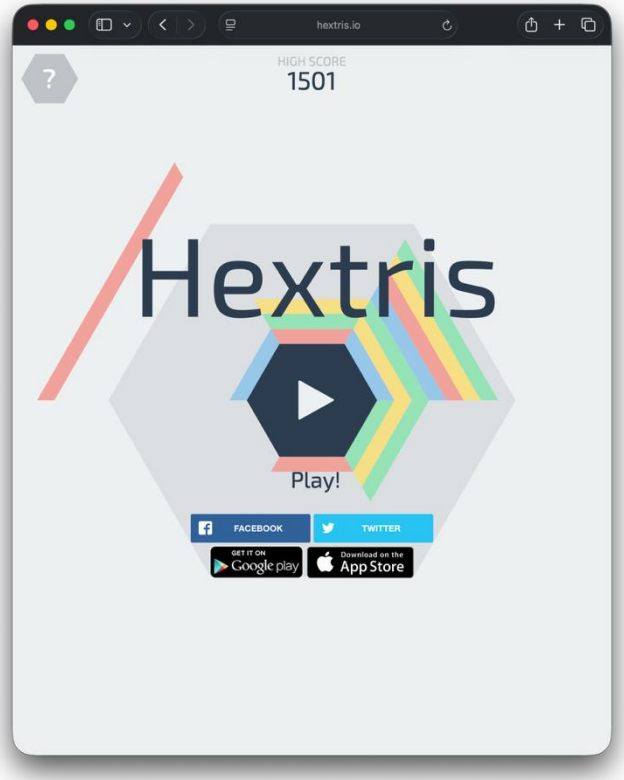
Cursor for students

- Free ”pro” Cursor account for students
- https://cursor.com/students
- If it didn’t work…
  - Try again
  - Contact SheerID customer service



Last Wednesday

https://hextris.io



Names	Idea	Votes
	Adding lives	0
	Add bombs (3) press space to launch a bomb on a side to clear the blocks on the side	3
	Rainbow block to match all colors	7
	Multiplayer to compete side by side	1
	Collaborative mode two people control the hex turning	0
	Center hex rotates on its own faster and faster	2
	Each block is a different speed (random)	2
	Difficulty level (speed)	

Show and Tell

Reflection prompts this week

1. What goes into a clear and effective prompt?
2. What went wrong in your prompting this week? Why? How did you fix it? Provide 3 examples.
3. What limitations did you observe in the use of the LLM tools? Provide 3 examples.
4. How do you anticipate your future as a software engineer to change as AI continues to improve?
5. ~~What is the difference between "vibe" coding and "structured" AI coding?~~
6. What are the differences in your use of the LLM tools when creating a program from scratch vs. editing an existing codebase?

Today: Discuss Your Reflections

- Form groups based on the reflection question you chose
- Recount your reflective essay ideas to your group (12 min)
  - Explain why and how you came to your conclusions.
- Create a Google Slide presentation to support a class discussion on your reflection question (10 min)
  - Put your slides in the folder at *https://bit.ly/reflection-week1*
  - You may *not* use AI to create your slides or run the discussion.
- Dr. Begel and Dr. Henley will choose the group order.

Discussion Rubric

- For the discussion you're leading:
  - As an individual
    - Say something meaningful
    - Provide concrete examples
    - Implications for practice or the future
    - Give a pro/con
  - As a group
    - Get the class to respond meaningfully to you
    - Try to make it feel like a single presentation, not a sequence of 3 presentations
    - Create slides to support your discussion points

Discussion Instructions

- Come up to the front to lead your discussion (10 min)
  - Be sure to turn on slide captioning before you begin.
  - Each group member may speak for less than 1 minute total.
  - Introduce yourself!
  - Pick a group member to moderate who is speaking from the class.
  - Pass out (2) portable mics for class members to use.

  - Class members should speak up and contribute to the discussion.
  - After you speak, pass your microphone to the next speaker.
- Every class member must contribute twice over the class session.
  - It only counts if you say something meaningful

Homework: Form Project Teams

- Talk to classmates and form 2-3 person teams
  - There will be a max of 5 project teams.
- You will be asked to replicate the entire software stack for a popular tech startup over the next 10 weeks.

- Register your team at *https://bit.ly/cmu-team-signup* by Monday September 8 11:00am.

- On Monday, we will introduce the course project and the list of tech startups you can choose from.