

Open Project Guidelines/Requirements

CSE 307

Motivation

To avoid accusations of AI cheating, college students are turning to AI

Students are taking new measures, such as du
using AI “humanizer” programs, to beat accus

May 26, 2025 - Technology

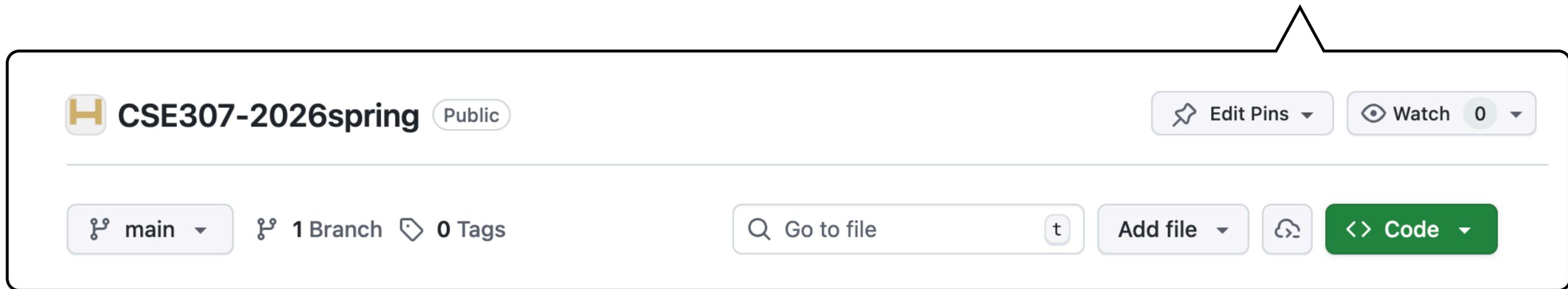
AI cheating surge pushes schools into chaos

Kicked out of Columbia, this student doesn't plan to stop trolling big tech with AI

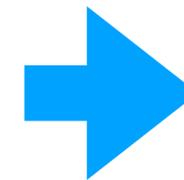
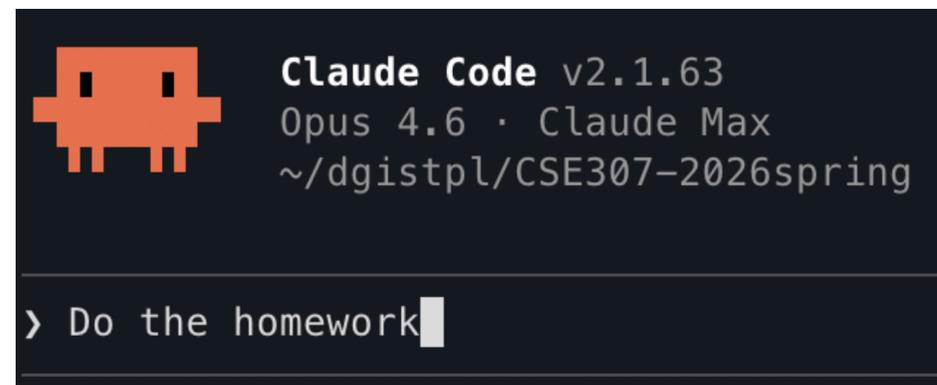
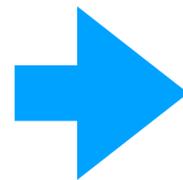
Roy Lee built an AI app that he claims got him internship offers from the likes of Amazon and Meta. A spokesperson for Columbia declined to comment on individual students.

Motivation

- Assignment repository: <https://github.com/dgistpl/CSE307-2026spring>



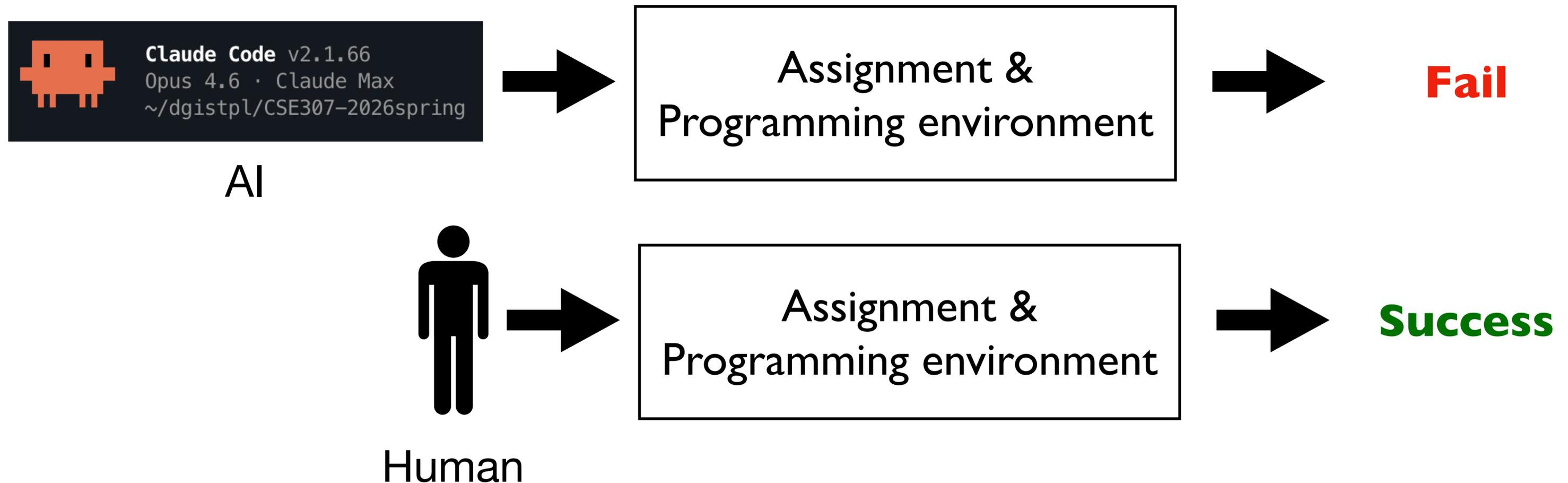
```
(* prime : int -> bool *)  
(* Check whether a number is prime. *)  
let prime (n : int) : bool =  
  failwith "TODO"
```



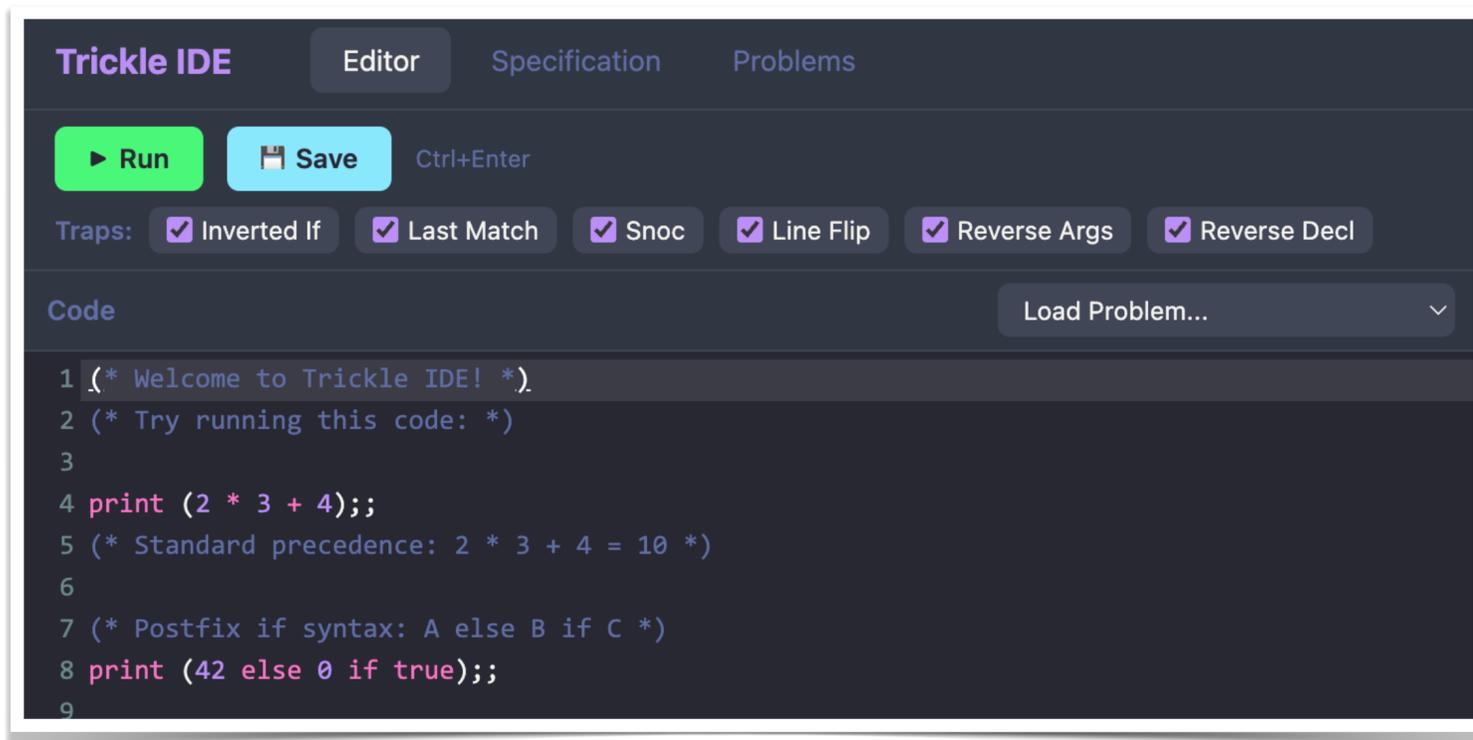
```
let prime (n : int) : bool =  
  if n < 2 then false  
  else  
    let rec check d =  
      if d * d > n then true  
      else if n mod d = 0 then false  
      else check (d + 1)  
    in  
    check 2
```

Goal

- Design a programming language & programming environment for cheating-free assignments
- Assignment uses problems in: <https://github.com/dgistpl/CSE307-2026spring>



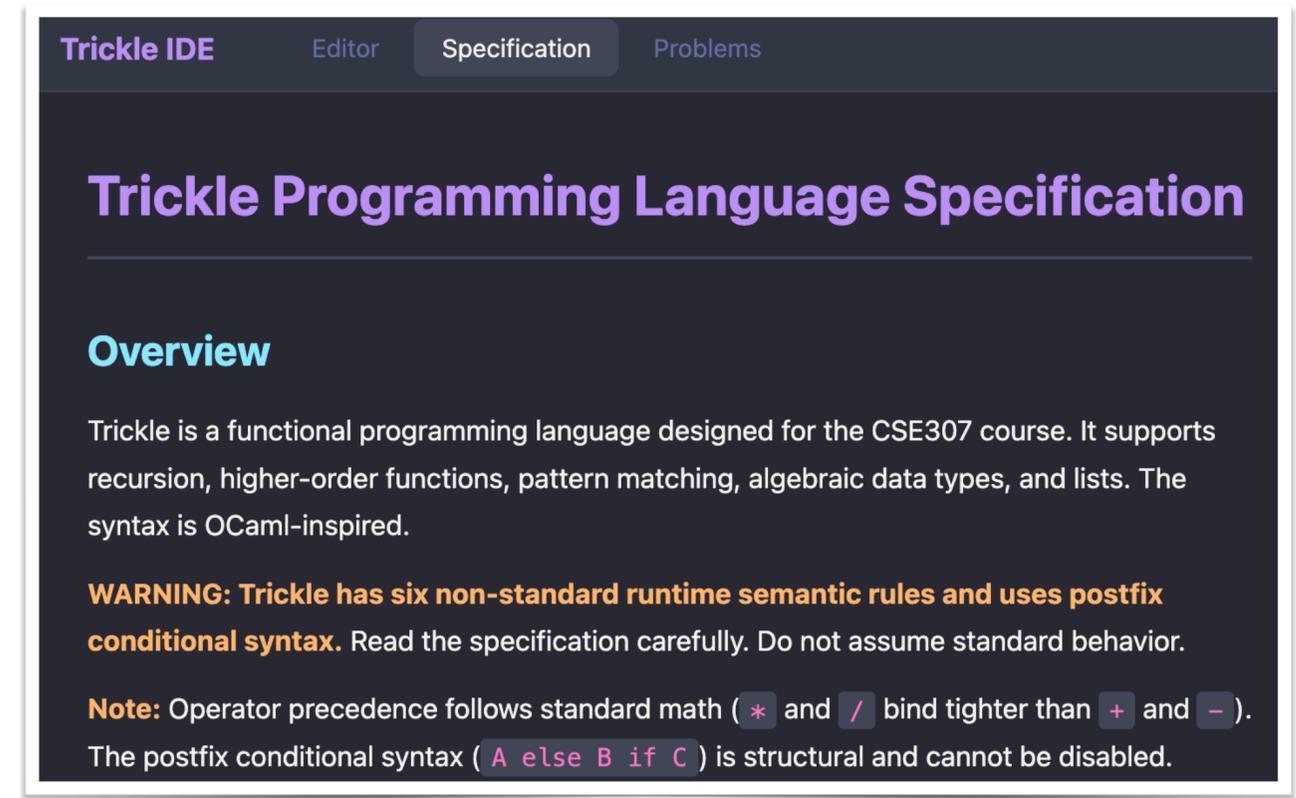
Example Environment: Web Programming



The screenshot shows the Trickle IDE interface in the 'Editor' tab. At the top, there are tabs for 'Trickle IDE', 'Editor', 'Specification', and 'Problems'. Below the tabs is a toolbar with a 'Run' button (a green play icon), a 'Save' button (a blue floppy disk icon), and the keyboard shortcut 'Ctrl+Enter'. Underneath the toolbar is a 'Traps' section with several checked checkboxes: 'Inverted If', 'Last Match', 'Snoc', 'Line Flip', 'Reverse Args', and 'Reverse Decl'. Below the traps is a 'Code' section with a 'Load Problem...' dropdown menu. The code editor contains the following text:

```
1 (* Welcome to Trickle IDE! *)
2 (* Try running this code: *)
3
4 print (2 * 3 + 4);;
5 (* Standard precedence: 2 * 3 + 4 = 10 *)
6
7 (* Postfix if syntax: A else B if C *)
8 print (42 else 0 if true);;
9
```

Provide editor



The screenshot shows the Trickle IDE interface in the 'Specification' tab. At the top, there are tabs for 'Trickle IDE', 'Editor', 'Specification', and 'Problems'. The main content area is titled 'Trickle Programming Language Specification'. Below the title is an 'Overview' section. The text in the overview reads:

Trickle is a functional programming language designed for the CSE307 course. It supports recursion, higher-order functions, pattern matching, algebraic data types, and lists. The syntax is OCaml-inspired.

WARNING: Trickle has six non-standard runtime semantic rules and uses postfix conditional syntax. Read the specification carefully. Do not assume standard behavior.

Note: Operator precedence follows standard math (* and / bind tighter than + and -). The postfix conditional syntax (A else B if C) is structural and cannot be disabled.

Provide specification

Constraints

- You can do the project as a team of up to two people
- You can use any tools to do the open project!

(e.g., You can freely use AI to do the project)

Reward

- If you successfully complete the project, you will receive a higher grade.

For example:

