Algorithms

2-9-24

A pen and watercolor sketch of computer science students working on an NP-hard problem

Announcements

- HW3 (due Saturday)
- Attendance worksheets now posted in advance
- AlgoBOWL
  - Need teams of exactly **three people**
  - **Action item:** Complete teammate form by next Monday, 2/12/24, at 5PM
    - Only **1 student** on your team should do this
    - If you do not find your own team, we'll randomly assign you after the deadline

Agenda Today

- Review AlgoBOWL problem & logistics
- Recommendations for team selection and teamwork
- HW3 questions

Review AlgoBOWL problem & logistics

(See Canvas Documents)

Mini-Deadlines:

Non-negotiable & no extensions due to the nature of the competition

Input upload: Due at 10pm on Monday (2/26)

Output upload: Due at 10pm on Wednesday (2/28)

Verification: Due at 10pm on Thursday (2/29)

Resolution: Due at 10pm on Friday (3/1)

Open Verification & Evals: Due at 10pm on Monday (3/4)

There will be prizes!! 🏆🏆🏆

- …for the **top three best teams** based on performance in the competition

- … for **up to five individual students** who are nominated as awesome teammates/leaders/innovators *(new to AlgoBOWL this year)*

Recommendations for team selection & teamwork

Finding a team

- *Compatibility*
  - Check your schedules immediately
  - **Immediately** schedule regular co-working times
    - In-person likely more effective
    - Minimally shoot for synchronous
- Discuss communication norms/expectations, preferences, and channels (e.g. texting? Discord? Email? Shared documents?)

Being **a team**

- *Explicitly discuss your **varying skill levels/responsibilities***
  - Define a **clear leader** to manage and delegate tasks
  - Divide & conquer on the labor!
    - Brainstorming strategies, writing pseudocode
    - Writing code
    - Generating inputs
    - Testing and debugging

Being **a team**

- Use best practices of software engineering!
    - Use git to keep track of best outputs
    - Well-organized file and code hierarchies
    - Write a bash script that can run all inputs
- Tiny bit more effort upfront, but will make the project easier for you, we promise
- Better professional practice, as well

Being **a team**

- Respect and responsiveness toward **all** teammates
- **Likely** that some teams have students at different skill levels
  - More experienced should take the opportunity to mentor and teach less experienced
  - View this as *professional growth* rather than an annoyance
    - You can develop management skills == awsm!
    - Plus, there will be **prizes** for awesome teammates! :)

Teammate Check-In Form

- Always located in Canvas Week 5 Module
- Complete as many times as you like (or never)

Use the form to share:

- Positive Kudos (**prizes** for up to 5 students! ⭐⭐⭐⭐⭐)
- Challenging Issues

This is a new experiment for AlgoBOWL

- Main intent: Encourage great teams & peer learning!
- Side goal: Keep track of and proactively respond to problems

1. If your preferred name/pronouns differ from how Mines has them associated with your email, please share your please share your preferred name/pronouns here. (Optional) 📖

Enter your answer

2. Are you providing positive kudos for a teammate or sharing a challenging issue? * 📖

○ Positive Kudos

○ Challenging Issue

3. What is the name and email of the teammate(s) you'd like to share about? * 📖

Enter your answer

4. Please tell us about what's going on. Be specific! * 📖

Enter your answer

5. Please rate how this situation is impacting the team. * 📖

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Extremely negative-
ly - we really need
help.

Extremely positively
- wow, what a
rockstar!

6. Do you feel that the situation requires an intervention?

(Note: We will be considerate and caring in how we approach challenging issues; there's no one-size-fits all solution, and we understand that the social nature of team issues can be hard. Sometimes, we may request a meeting with *you* to help you manage the situation without direct instructor intervention, to provide you with strategies for managing the situation internally.) * 📖

○ No intervention needed. I'm giving someone positive kudos! 🎉

○ A TA told me me to fill this form out for later reference, but I don't think a professor needs to get involved at this stage.

○ I haven't talked to a TA, and no intervention is requested. I just wanted to note an issue early, in case it becomes a bigger problem down the road.

○ I'm not sure...maybe? I might be able to manage it myself with some guidance. **(**Select a professor in the next question *if* you want a followup.**)**

○ Yes, I think our situation needs an intervention from an instructor ASAP. **(**Make sure to select your professor in the next question.**)**

7. **Thanks for sharing!**

This last question is optional. If you'd like to request an intervention or a consult for some guidance about your situation, please select which professor you'd like to work with. Note that Prof. Estelle Smith is generally managing this form, so it's OK to select her by default, even if you are not in her section. But if you would rather speak with Prof. Tolga Can, of course that is also totally fine!

We will do our best to respond ASAP or maximally within 2 business days. Please send an email to the selected professor <u>only</u> if you have not heard back after 2 business days. 📖

○ Prof. Estelle Smith

○ Prof. Tolga Can

HW3 Questions