CSE 332 Summer 2020

Data Structures & Parallelism

Instructor: Richard Jiang
Email: rjiang98 (at) cs.washington.edu

Course Webpage: http://www.cs.washington.edu/332/
Meeting Times: 9:40-10:40am: MWF, 9:40-10:40am/10:50-11:50am: Th
Course Prerequisites: CSE 143, CSE 311

Recommended Textbook: *Data Structures and Algorithm Analysis in Java* 3rd Ed., Mark Allen Weiss, Addison Wesley: 2012, ISBN-10: 0132576279

Course Goals: CSE 332 is a course about data structures, abstraction, analysis, algorithms, and parallelism. Every exercise, lecture, section, and project will hit on at least one of them and quizzes will gauge your understanding of these topics. Additionally, the course has several "hidden" meta-goals such as interview prep, real world applications, working with large code bases, and developing code as a group.

Assessment: The grades for the course will be calculated approximately as follows

- 25% - Exercises
- 35% - Projects
- 40% - Quizzes
- EC - Participation

Exercises are weekly assignments meant to be done ***individually***. These will reinforce your understanding of topics we are covering and the theory behind them. Some exercises require you to write short bits of code or complete an activity on line, while others are more traditional "written" exercises. For "written" exercises, we require these to be turned in electronically. LaTex is one option, but neatly written scanned documents will also be fine as long as they are readable.

Projects are larger programming assignments meant to be done in ***pairs of two students***, except under unusual circumstances. Programming projects will be graded on correctness, architecture and design, and analysis. Note that your answers to the analysis questions will be very heavily weighted. We will not grade you on code style, as long as your code is readable and you follow the guidelines explicitly given in the project handouts. Program design/architecture and analysis are crucial in this course. There will be three projects throughout the quarter.

Quizzes are bi-weekly assignments meant to be done ***individually***. They will test your understanding of topics presented in the previous couple of weeks. Quizzes will also push you to apply and synthesize your knowledge to solve realistic data structures problems. Each quiz will only be available for 48 hours starting every other Thursday 12 am to Friday 11:59 pm. There will be five quizzes throughout the quarter.

Participation in lectures, sections, office hours, and Piazza will be treated as "Extra Credit" and can help bump a borderline grade at the end of the quarter. This credit will only have a small effect on the overall grade and can only positively impact a students grade.

Course Resources: To help you stay engaged with the course in an online setting, the staff will support you outside lectures and sections in these ways.

Piazza is an online discussion board that will house course announcements and student questions. Questions about anything course related is welcome, including logistic, material, or assignment questions. We also encourage you to answer questions or engage in discussions with your fellow students.

Office Hours are for conceptual or debugging questions that are better suited for a Zoom call with a TA and other students. TAs will help facilitate conversations setting up breakout rooms and whiteboarding concepts. Again, we encourage students to join office hours to engage with other students, and solve problems together.

One-on-Ones are for topics that are not suited for office hours. You can request a one-on-one with any staff member to talk about extenuating circumstances, support or advice for a personal issue, or follow up questions from a previous office hours. There will be an online form to request a one-on-one linked on the course website.

Late Policy: You will have four late days to use over the course of the quarter on projects. Late days give you 24 additional hours to submit a project and both partners must have a late day to submit a partner project late. Any particular project may only be 48 hours late at most. If unusual circumstances truly beyond your control prevent you from submitting an assignment or attending an exam on time, you should discuss this with the instructor, preferably in advance.

Collaboration Policy: Programming projects will be "partner assignments" in which you will work closely with another student. For exercises and quizzes, we expect all written/programmed work to be your own. **You must at least attempt a problem on your own before discussing it in a group**–but we do encourage you to brainstorm together after first attempting on your own! During brainstorming sessions, you may use a whiteboard, but you may not take any

typed/written or photographed work outside of the session. If you collaborate with anyone in any capacity, you must identify them at the top of your assignment as a collaborator.

Referring to solutions found on the web or solutions from this or other courses from previous quarters is also considered cheating. We plan on running similarity-detection software over all submitted student assignments, including assignments from past quarters.

If you do not follow these rules, you will be considered to have cheated. Cheating is a very serious offense. If you are caught cheating, you can expect a failing grade and initiation of a cheating case in the University system. Cheating is an insult to the instructor, to the department, and most importantly, to you. If you feel that you are having a problem with the material, or don't have time to finish an assignment, or have any number of other reasons to cheat, then talk with the instructor. Copying others' work is not the solution.

To avoid creating situations where copying can arise, never e-mail or post your solution files. You can post general questions about interpretation and tools but limit your comments to these categories. If in doubt about what might constitute cheating, send the instructor an email describing the situation. For more details see the Academic Misconduct web page (http://www.cs.washington.edu/students/policies/misconduct).

Accommodations: Please refer to university policies regarding disability (http://depts.washington.edu/uwdrs/currentstudents/accommodations) or religious (https://registrar.washington.edu/staffandfaculty/religiousaccommodations-polic/) accommodations.

Privacy: This course is scheduled to run synchronously at your scheduled class time via Zoom. These Zoom class sessions will be recorded. The recording will capture the presenter's audio, video and computer screen. Student audio and video will be recorded if they share their computer audio and video during the recorded session. The recordings will only be accessible to students enrolled in the course to review materials. These recordings will not be shared with or accessible to the public.

The University and Zoom have FERPA-compliant agreements in place to protect the security and privacy of UW Zoom accounts. Students who do not wish to be recorded should:

- Change their Zoom screen name to hide any personal identifying information such as their name or UW Net ID, and
- Not share their computer audio or video during their Zoom sessions.