CS60002 Distributed Systems Spring 2025

The group-wise project allocation is now finalized, please refer to the list sent. Each group is expected to do the following in the project (unless I tell you otherwise in future discussions):

- Understand what the topic is about and usual features of such a system in use
- Understand basic design issues in the topic area
- Understand basic architectures in use for implementing such systems
- Study at least 3 practical implementations in use (now or in the recent past)
- Write a report on the above points
- Build a prototype system in the topic area
- Give a demo/presentation at the end of the semester

There will be deviations as per our discussions. If you are confused, please ask me.

Tentative deadlines:

1. Do a very preliminary scan of the area and have a basic discussion on your topic (15-20 minutes) with AG (by March 4, AG will schedule)

2. Submit the first draft of the report by March 15

- a. Will be incomplete I am sure. But should have something on the first 3 bullets above at least, even if you do not understand much, and should have collected materials backing it.
- b. Should also submit separately a set of features that the group plans to implement
- 3. Second round discussion with AG between March 15-17th. SWill try to freeze features somewhat so that you can start implementing.
- 4. Final report due on March 25.
- 5. Third round discussion with AG if needed between March 25-30th.
- 6. Project submission and demo/presentations scheduled April 12-13.

Report Guidelines:

- 1. To be typed in 12 point Times/Times New Roman font, single-spaced, single column, with around 1" margin on all sides. Text should be both left and right-justified. Pictures, if any, should be of reasonable size, enough to read clearly but not too big. Sections/subsections etc. should be clearly numbered. References should be complete. Look at published papers to see the styles to compare. Ask me if there are any questions. Follow the format strictly, poorly formatted projects will incur penalties.
- 2. Size of the report can vary with the project. An approximate size is 18-20 pages. If your report is getting to be less in the above format, talk with me.
- 3. Every part of the report must be written by you. You can learn the material from different sources, but write in your own words, do NOT cut-and-paste verbatim from any source. If you have to quote something verbatim, put it in "" and give reference. Similarly, if you borrow a picture from anywhere, give credit (You can just add "courtesy:" in the caption of the figure at the end, theis reference to a paper or website etc. from where you took the picture). Plagiarism is a serious

- offence and if detected, will involve a large penalty on your report (minimum 50%, can be up to 100%).
- 4. Please note that you are responsible as a group, so any penalty will apply to everyone equally in general. So make sure you coordinate properly that this does not happen.

Remember this is a group project, so decide what should be done together and what should be divided up for better performance. You can divide any which way you want, but finally everyone must understand the entire report and the entire code.

Specific TAs will be assigned to specific groups. Please discuss with them as you go on. Please feel free to talk to me anytime on anything regarding the projects if needed after that. Good luck.