

## *Project*

### *General Description*

---

#### *Project Overview*

An operating system is system software that abstracts and arbitrates. An operating system acts as an intermediary between the user and the available hardware. It is also responsible for managing the available hardware. The best way for you to understand the concepts of an Operating System is to build an operating system and then to experiment with it to see how the OS manages resources and processes. In this project, you will be asked to implement the concepts taken in the course, such as the scheduler, memory management and synchronization.

#### *Project Instructions*

Please read the following instructions carefully:

- a) Any case of plagiarism will result in a zero.
- b) Any case of cheating will result in a zero.
- c) A cheating detection tool will be used to compare the submitted projects against all online and offline implementations similar to the project idea.
  - The projects that have more than 50% similarity percentage will receive a zero.
- d) It is your responsibility to ensure that you have:
  - Submitted before the deadline.
  - Submitted the correct file(s).
  - Submitted the correct file(s) names.

#### *Submission Guidelines*

- The submission deadline for the project is **Monday 20 May 2024 at 11:59 PM**
- You are requested to submit the following documents:
  1. A 1-min video to demonstrate the working experiment (please narrate and comment on the results)  
→ name the Video (**Project\_Team\_m\_Video.mp4**)
  2. The required project description report  
→ name the report (**Project\_Team\_m\_Report.pdf**)
  3. The developed C code of the experiment and the CMakeLists.txt in a single zip folder  
→ name the Code (**Project\_Team\_m\_Code.zip**)
- Please upload your milestone deliverables to your drive as a .zip file with the following naming format:  

(Ex.: CSEN602\_S24\_Project\_Team\_m.zip)

where m is your team number.

## ***Project***

### ***General Description***

---

- Submit **ONLY** the sharing link through the below form and ***Make sure that you give permission to access***
- [https://docs.google.com/forms/d/e/1FAIpQLSfAY94XLjb-HMa2raeU27LuPV78NwioGKnZTnB3WE4qPeKkug/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSfAY94XLjb-HMa2raeU27LuPV78NwioGKnZTnB3WE4qPeKkug/viewform?usp=sf_link)

### ***Evaluation Process***

- The evaluation process of the process will be conducted during the first 2-3 days of the revision week.
- The evaluation timetable will be posted on the CMS during the last teaching week.

### ***Project Grading***

The project will be graded upon multiple criteria for each of the submitted deliverables. These criteria including (*below is just some grading items and more are considered*):

- The overall functionality of the project.
- Each technical aspect of the project will be graded as well.
- The quality of the submission (for example: well-commented and generic code, comprehensive and well-written reports, clear and comprehensive videos, and others).
- Submission on time with no delays (late submissions will be subject to deduction).
- The evaluation attendance is obligatory for all members and graded upon only the showing up.
- There is a collective team grade, yet during the evaluation and based on your discussion and answers, individual grades will be added as well.
- Note extra bonus marks will be added in case of successfully merging the operating systems course project and the computer systems course project (maximum bonus is 1.75% to be added to the total 100% course grade)