

Back to all evaluation sheets

Points earned

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# philosophers

You should evaluate 1 student in this team

#### Introduction

Please follow the rules below:

- Remain polite, courteous, respectful, and constructive throughout the evaluation process. The well-being of the community depends on it.
- Oldentify with the student or group whose work is being evaluated the possible dysfunctions in their project. Take the time to discuss and debate the problems that may have been identified.
- You must consider that there might be some differences in how your peers might have understood the project's instructions and the scope of its functionalities. Always keep an open mind and grade them as honestly as possible. The pedagogy is useful only if the peer-evaluation is done seriously.

#### **Guidelines**

Please follow the guidelines below:

Only grade the work that was turned in to the Git repository of the evaluated student or group.

Ouble-check that the Git repository belongs to the student(s). Ensure that the project is the one expected. Also, check that 'git clone' is used in an empty folder.

Oheck carefully that no malicious aliases were use evaluating something that is not the content of the of

# Points earned 0

To avoid any surprises and if applicable, review facilitate the grading (scripts for testing or automation

If you have not completed the assignment you are going to evaluate, you must read the entire subject prior to starting the evaluation process.

Use the available flags to report an empty repository, a non-functioning program, a Norm error, cheating, and so forth. In these cases, the evaluation process ends and the final grade is 0, or -42 in the case of cheating. However, except for cheating, students are strongly encouraged to review together the work that was turned in, in order to identify any mistakes that shouldn't be repeated in the future.

Remember that for the duration of the defense, no segfaults or other unexpected, premature, or uncontrolled terminations of the program will be tolerated, else the final grade is 0. Use the appropriate flag.

You should never have to edit any file except the configuration file if it exists. If you want to edit a file, take the time to explain the reasons with the evaluated student and make sure both of you are okay with this.

You must also verify the absence of memory leaks. Any memory allocated on the heap must be properly freed before the end of execution.

You are allowed to use any of the different tools available on the computer, such as leaks, valgrind, or e\_fence. In case of memory leaks, tick the appropriate flag.

#### **Attachments**

Please download the attachments below:



### **Mandatory Part**

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#### **Error Handling**

**Error Handling** 

This project is to be coded in C, following the Norm.

Any crash, undefined behavior, memory leak, or norm error means 0 to the project.

On some slow hardware, the project might not work properly. If some tests don't work on your machine try to discuss it honestly before counting it as false.

Yes No

#### Global variables

Global variables

Check if there is any global variable which is used to manage the shared resources among the philosophers.

If you find such a nasty thing, the evaluation stops here. You can go on and check the code, but do not grade the exercises.

Yes No

#### philo code

philo code

Ensure the code of philo complies with the following for explanations.

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Check there is one thread per philosopher.

Check there is only one fork per philosopher.

Check if there is a mutex per fork and that it's used to check the fork value and/or change it.

Check the outputs are never mixed up.

Check how the death of a philosopher is verified and if there is a mutex to prevent a philosopher from dying and starting eating at the same time.

Yes No

#### philo testing

philo testing

Do not test with more than 200 philosophers.

Do not test with time\_to\_die or time\_to\_eat or time\_to\_sleep set to values lower than 60 ms.

Test 1 800 200 200. The philosopher should not eat and should die.

Test 5 800 200 200. No philosopher should die.

Test 5 800 200 200 7. No philosopher should die and the simulation should stop when every philosopher has eaten at least 7 times.

Test 4 410 200 200. No philosopher should die.

Test 4 310 200 100. One philosopher should die.

Test with 2 philosophers and check the different times: a death delayed by more than 10 ms is unacceptable.

Test with any values of your choice to verify all the philosophers die at the right time, that they don't s

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Yes No

#### **Bonus Part**

#### philo\_bonus code

philo\_bonus code

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Ensure the code of philo\_bonus complies with the and ask for explanations.

Check that there is one process per philosopher and that the main process is not a philosopher.

Check that there are no orphan processes at the end of the execution of this program.

Check if there is a single semaphore that represents the number of forks.

Check the output is protected against multiple access. To avoid a scrambled display.

Check how the death of a philosopher is verified and if there is a semaphore to prevent a philosopher from dying and starting eating at the same time.

Yes No

#### philo\_bonus testing

philo\_bonus testing

Do not test with more than 200 philosophers.

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Yes No

## **Ratings**



