UNIVERSITY OF JAFFNA
FACULTY OF ENGINEERING
EC 6110: Operating Systems
Group Assignment - February 2025

Purpose of this assignment is to get familiar with Operating System functions.

In this project students are expected to choose and implement one of the following Operating Systems function.

1. For a given set of tasks (should be given as the input for your system), you are requested to implement all the following scheduling algorithms and select the best one for that situation.
    - First Come First Served (FCFS)
    - Round Robin
    - Shortest Process Next
    - Shortest Remaining Time Next
    - Priority Scheduling

2. For a given reference string (should be given as input) select the best replacement algorithm from the following set of algorithms.
    - First In First Out (FIFO)
    - Least Recently Used
    - Least Frequently Used
    - Most Frequently Used

3. For a proper set of inputs including request queue, suggest the best disk scheduling algorithm from the below list.
    - First Come First Served (FCFS)
    - Shortest Seek Time First (SSTF)
    - SCAN
    - C-SCAN
    - C-LOOK

At the end of this project you are requested to do a **ten** minutes presentation with the following information,

For the selected main task,

1. Briefly explain the main and sub tasks. [10 marks]
2. Clearly defined objectives of each member. [10 marks]
3. Proper user interface for input and output [20 marks]
4. Expectation in the output:
    a. Correctly explained output [20 marks]
    b. Comparison with other methods [15 marks]
    c. Whether all the required algorithms are implemented [25 marks]

Note:
This project partially contributes to the 15% of your final marks for the module.
You are free to use any language/package.