CS 4760 - Operating Systems - Programming Assignment 6
Optional Project – for extra credits
Due Date: Wednesday, 10 May

Deliver your project using Mygateway to 23.59 on the due date.

Point Allocation: 4

Memory Management

In this project, we will be designing and implement a part of the memory management module for our Operating System Simulator "oss" however you do not need to use "oss" implemented in previous programming assignments, moreover this time you need to perform some experiments using your new "oss" implementation. Firstly, you need to check the number of page faults for implemented page replacement algorithm and compare it with the **optimal policy**. You can implement LRU, FIFO or CLOCK page replacement algorithm, additionally assume a fixed frame allocation (fixed resident set size) – 5 frames by default. Experiments should be performed for 10 different randomly generated processes; each process consists of 8 pages. The size of the main memory is sufficient to save the 50 pages. The page "numbers" stream formed by executing of each process should be generate randomly, no more than 15 page "requests".
Then using the stream of page "request" for each process you need to check the number of page faults for optimal policy. Finally, all of received during experiments results should be presented in the report, together with your conclusions.

Deliverables

Handin an electronic copy of all the sources, README, Makefile(s), **and the Report with results of experiments and your conclusions** using Mygateway.
Please remember you cannot forget about the REPORT. When you will not submit the Report, you receive 0 points.