Laboratory Report on Paging Algorithms

Your Name

January 4, 2017

Abstract
An abstract summarizing the report in no more than 200 words.

1 Introduction

A gentle introduction to the subject for the reader ...

Note that this is only a template. Keep the section headers and replace all the content with your own.

2 Theory

A short descriptions of the algorithms in question ... with references to Silberschatz et al. [1, 2, 3], and possibly other, reliable sources.

3 Method

What simulator and operating system was used. What type of sources has been included. In essence, anything related to how the lab was performed by you.

4 Results

The hard-earned results ...

E.g. Reference string X generated Y page-faults of Z possible, see the data in A.

Genereally speaking the result chapter should be short, on-point, and only include objective data. What does this mean? It means only your own calculations, and short-hand results from the simulator should be presented. The full input and output from the simulator should be put inside the appendix at the end of the report, and simply referenced from this section. It is also important that subjective statements or analysis takes place in this section.

5 Analysis

Analyze and try to explain the results. Compare with your own calculations. Motivate your results based on theory and assumptions. Draw conclusions which are then summarized in Section 6. In this section subjective statements are allowed, but are best saved for the conclusions.

6 Conclusion

Here you summarize the following:

1. Answer whether the algorithms are correctly implemented or not?
2. Show that the algorithms perform differently for a given reference string. Analyze the results.
3. Provide a reference string which generates a minimum page-fault rate for each algorithm.
4. Provide a reference string which generates a maximum page-fault rate for each algorithm.
5. Provide evidence of Belady's anomaly for at least one of the algorithms suffering from it.

Remember that you should never present any new data in your conclusions. **In this section you merely draw conclusions based on your results and your own analysis from the previous sections**.

References

[1] Abraham Silberschatz, Peter Baer Galvin, and Greg Gagne. *Operating System Concepts*. John Wiley & Sons Inc, Hoboken, N.J., 8 edition, 2009. International Student Version.

[2] Abraham Silberschatz, Peter Baer Galvin, and Greg Gagne. *Operating System Concepts*. John Wiley & Sons Inc, Hoboken, N.J., 9 edition, 2013. International Student Version.

[3] Abraham Silberschatz, Peter Baer Galvin, and Greg Gagne. *Operating System Concepts*. John Wiley & Sons Inc, Hoboken, N.J., 9 edition, 2013.

A Data

Reference strings and corresponding output are given here. The first FIFO-experiment yielded the following data. The reference string:

```
r0 w3 r2 r4 w4 w1 r3 r5
```

Inputted using the command ...
And the resulting output from the program:

```
page 0 generated page fault
page 0 allocated to free frame 0
page 0 paged in
page 0 mapped to frame 0
page 3 generated page fault
page 3 allocated to free frame 1
page 3 paged in
```

```
page 3 mapped to frame 1
page 2 generated page fault
page 2 allocated to free frame 2
page 2 paged in
page 2 mapped to frame 2
page 4 generated page fault
page 4 allocated to free frame 3
page 4 paged in
page 4 mapped to frame 3
page 4 mapped to frame 3
page 1 generated page fault
page 1 allocated to free frame 4
page 1 paged in
page 1 mapped to frame 4
page 3 mapped to frame 1
page 5 generated page fault
page 0 paged out
page 5 paged in
page 5 mapped to frame 0
```