**Input Sensitive Profiling for Tasteful Server**

**CS 441:**

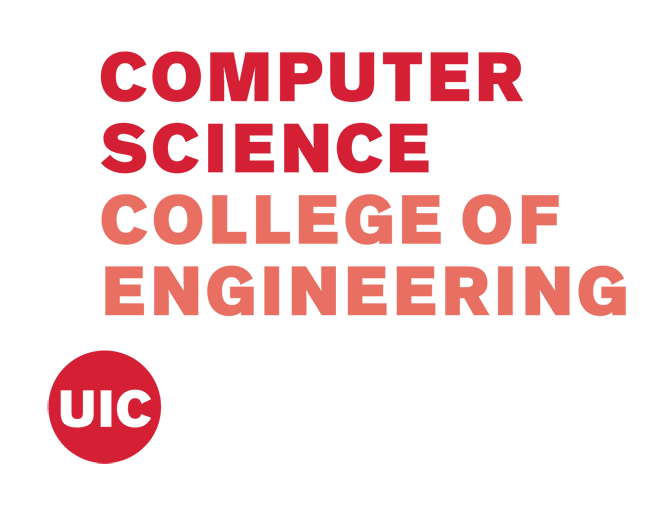
**Course Project Report**

**Abhijay Patne**

**UIN: 663324999**

**Sandeep Singh**





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**Learnings**

1] Right tool makes the difference

Initially I was randomly selecting profilers and trying to find some (any type of) bottleneck in the application. But after discussing progress with Bikas, I understood that major focus should be on thread locks contention. After that discussion I started looking for multithreading related profilers. Earlier, I spent a lot of time playing with different profilers, especially aprof and see how do they work, what are their features.

I came across DRD vary late. Had I found this tool earlier, I could have done more in-depth analysis and possibly could have tried to fix the problems.

2] Continuous feedback on work is important

From the start of the project, I was running the program as it is and was trying to figure out why the number of threads is always constant. Was trying various load testing techniques to see what type of load will increase the number of threads. I was under the impression that we had to profile the original code (the code author of the application has written). But when I discussed this with problem with Bikas and Professor Mark, they suggested me to change the application source code and

3] Importance of Documentation at Given Time

You should document your work immediately after you complete it, in worst case. If you have better idea of what the outcome will be, better write it (or at least take notes of them) before you do it, so that at last moment you need not worry about how you did that and if you are missing anything. In summary, basic design should be prepared before actually starting the work.

**Attached Files Description**

**References**

1. UIC Logo: http://logos.uic.edu/DOWNLOAD.CGI?document=COL.ENG.CSCI.LOCKB.SM.RED.PNG