**README**

CPU Scheduler

Version: 1.0

1. **What is this program?**

This program was designed to simulate the following CPU Algorithms:

1. First Come, First Serve (aka FIFO)  
   A process enters into the scheduling queue based on the arrival time and will execute based on the queue.
2. Shortest Job First

The processes that are pushed into the queue will be sorted by least CPU Burst to the greatest CPU Burst.

1. Priority

The processes that are in the queue will be immediately sorted by highest priority to least priority.

1. Round Robin with Quantum levels 4 and 8

The processes that are in the queue will be split into quantum times, thus all processes will be divided in to the CPU quantum rather than staying fully dedicated to just one processes until it has been completed or successfully processed.

This program will allow the user to input how many processes he or she wishes to generate, though the program will automatically populate the processes for the user by completely randomizing the individual processes properties. Once the processes has been generated, then the program will automatically execute the CPU Scheduling algorithms, which can take up to a few seconds to 86 minutes at max processes possible with full debug mode enabled.

1. **How does this program work?**

As the focus of this program is CPU Scheduling, this program will stick to the protocols of each CPU Scheduler. Though, as per-requirement, all processes have an arrival time of ‘0’. Thus, all processes arrive at the same time and enter the queue instantly.

1. **System Requirements**

Operating System: *Microsoft Windows Vista Ultimate Edition*

Platform: *SmartPotato*

CPU: *i468*

Memory: *256MB (minimum)*