iCode Operating system simulator

SYSTEM SUMMARY

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- iCode is a computer program that simulates operating system's different modules including (Synchronization , scheduling, Memory Management, Deadlock, I/O, Disk management and, Network)

System Configuration

To make sure to run our program successfully, there is a set of Pre-running programs that must installed on your device which are:

1- Python 2.7
2- Pyserial
3- Matplotlib
4- Drawnow
5- Psutil
6- Pylab
7- Java Virtual Machine 1.8.0_60 or above
8- Arduino drive

If you face any issues you can go to prerequisites file and follow the read me.

System Menus

3.2.1 Process

-Process menu provides user interface to 3 issues to simulate considering the Operating system processes:

- Scheduling
- Deadlock
- Synchronization

3.2.2 Memory

- Memory menu provides user interface to simulate memory paging and memory replacement algorithms

3.2.3 File System

-File system menu provides user interface to simulate disk management algorithms (Shortest seek time first and C Look) with graphing output screen

3.2.4 I/O

- I/O menu provides user interface to simulate I/O polling and interrupts by controlling lighting level of a led connected to the Arduino NANO kit and reading voltage level and plot it on the screen

3.25 Network

-Network menu provides user interface for a simple chat server using client server.