Assignment#2

Multi Threading in Operating System

Abstract

Multi-Threading on an operating system is the same as multitasking on a computer or the hardware inside the computer. There are two different types of Multi-Threading in Operating Systems.

Introduction

Multi-Threading in operating systems is defined as the operating system processes to manage its use by more than one user at a time and to manage multiple requests by the same user without having to have lots of copies of the programming playing in the computer. There are two different types of Multithreading in an Operating System, Kernel Threads and User Threads. Kernel Threads when talking about Multi-Threading is when the operating system manages the threads acting on kernel, an operating system core; it is supported by the operating system itself when processing. User Threads when talking about Multi-Threading is when the user is managing the threads inside the operating system of the computer, it is not controlled by the operating system like Kernel Threads are. Advantages with Multi-Threading in operating systems is that a user multi-task with their own computer, and communication in their operating system is efficient. Disadvantages of Multi-Threading is that it is difficult to code and finish, trouble is found when trying to create code for Multi-Threading applications.

Methodology

Multi-Threading in operating systems is a technique itself, it is given to us to use so we (operators of our computers) can use two or more programs at once and utilize our CPU

time. The technique is so important to our operating systems because it makes smaller context switching time, but also is lightweight and takes less time than others.

Results

What is Multi-Threading? Difference with Kernel and User Threads and, Multi Threading in Operating System

Conclusion

Multi-Threading is important for an operating system, it gives lots of advantages to users who choose to use it and have it on their operating system. With the two different types of Multi-Threading, it gives users an opportunity and a chance to change how they want to Multi-Task/Multi-Thread.

References

"Operating System - Multi-Threading." Tutorialspoint. Web. 21 Oct. 2020. https://www.tutorialspoint.com/operating_system/os_multi_threading.htm "What Are Threads?" Studytonight.com. Web. 21 Oct. 2020. https://www.studytonight.com/operating-system/multithreading