Introduction to operating systems

Technology, Information Technology

Operating system, its interface with software/hardware and role of Drivers

Operating system is the backbone of any computer and it serves as an underlying platform between the software programs and hardware installed. It ensures the proper working of the computer. The operating system keeps intact the input devices, output devices, any software application installed and other processes involved which are necessary for the proper working of a computer machine (Stuart, 2008).

For creating interface with hardware, the operating system makes use of device drivers; kernel of each operating system is adapted in such a way that it is compatible with variety of hardware devices. While for creating an interface with the software it makes use of the application programs. The elementary function provided by the operating system is that of interface for interaction between the hardware and software, since both are equally important for the suitable working of a computer system (Null & Lobur, 2010).

Role of drivers:

For the hardware that is connected to the system, specific softwares are needed which allow recognition by the operating system. This task is accomplished by the drivers which make it possible for the operating system to interlace the hardware with the application softwares and other components of the system. Drivers also help in ensuring the proper working of hardwares (Andrews, 2009).

The best practices for keeping the system current are updating it on regular basis. Downloading of the necessary patches that might be required with new drivers. Best practices also include ensuring the authenticity of

downloading material and checking its compatibility with the existing hardware and operating system kernel.

Hence operating system is that part of the entire system without which the computer cannot exist. Operating system is like the heart to human body that controls all other components and provides them with necessary utilities.

Works Cited:

Andrews, J. (2009). A+ Guide to Hardware: Managing, Maintaining and Troubleshooting. Cengage Learning.

Null, L., & Lobur, J. (2010). The Essentials of Computer Organization and Architecture. Jones & Bartlett Publishers.

Stuart, B. L. (2008). Principles of Operating Systems: Design & Applications. Cengage Learning EMEA.