Open source or closed source operating system

Technology

Apple is a multinational technology company dealing in computer software and hardware and other electronic devices. Its main brands include the MacBook laptop series, the iPhone series, and the Apple TV. Apple devices run on its operating system labeled the iOS or the OS X. Conversely, Android is a Linux-based operating system running on 33% of all Smartphone and most tablets. Android was acquired by Google in its late stages of development and is currently owned and maintained by Google.

Unlike Apple’s OS X, Android is an open source operating system. This means that users can develop their own code and programs using Android. These application programs are then attributed to them and they receive any financial proceeds from the application program. This is not true for Apple since the OS X is a closed source operating system. End-users cannot access the system to develop their own code. The OS X can only be used as was intended by the manufacturers. Code developers using the OS X have to be licensed and are usually Apple employees. It is illegal to sell or freely distribute software running on OS X without Apple’s express consent.

The matter of an open source or closed source operating system, then brings us to the availability of applications. Android has a wide selection of application surpassing the one million mark in 2013. This follows from the fact that users are allowed to develop their own applications and publish them in the Google Play Store. Apple on the other hand has much fewer application programs since they are exclusively developed by Apple’s limited and paid staff. While most Android applications are free, Apple sells its applications to users since they pay their programmers to develop this application.

A large selection of devices running the Android operating system is cheaper compared to iPhones, which run the iOS. Price is an important factor to consumers which creates a preference for Android based phones compared to iOS based phone. Devices running Android are however cheap with a compromise to hardware standards which leads to the next argument.

The iOS is more stable compared to the Android operating system. Users of Android based smartphones frequently complain about hang issues. This is especially for low-end phones. This is mostly a problem with the hardware manufacturers. Apple uses the iOS for devices whose hardware it manufactures or oversees their manufacturing. It can therefore ensure high quality hardware. iOS devices have a large enough RAM and the iPhone 5 and other subsequent iPhones run a 64-bit processor. This makes iPhones less prone to hang issues. Low-end devices running Android however compromise on the hardware to maintain low production costs. Consumers associate a phone to its operating system placing the blame of hang issues on the Android operating system.

Apple’s OS X can run on laptops, desktop computers and all other interfaces that Android runs on. Android on the other hand is only used on smartphones, tablets, and wristwatches in Android Wear. It is currently being developed for cars in the Android Auto. Android was developed with a touch user interface, making it difficult to be adapted for computers. Google uses the Chrome OS for its laptops and desktop computers. This is a disadvantage for Android users as they cannot fully synchronize their devices to their computers as Apple does with iPhones and Macs. Google has put a great

effort in synchronizing phones to laptops using cloud storage, ID logins, but Apple still has an advantage here as both the iPhone and Mac run the iOS.

Apple’s OS X is a more secure operating system compared to the Android operating system. There are benefits to running a closed source operating system, which include a secure operating system. Android’s open source operating system opens it up to malware developed for Android by rogue programmers. It is especially difficult to fix androids security problems since debugging measures on new versions may never reach some phones that cannot upgrade to the latest OS.

As much as Android was made with the intent of having an upgradeable operating system, upgrading and android operating system is much more complex than upgrading an iOS operating system. There are many devices running the Android system and upgradability depends on the adaptability of the operating system on that device. While relatively practical on Google’s Nexus phones it is almost impossible to upgrade on most Samsung devices. Upgrading the iOS on the other hand is a simple and almost automatic matter.