Google Android Operating System Uses and Features in a Nutshell

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What is Android?

Android is the worldâ€™s most popular mobile platform. Android is an operating system made by Google. It is an open source platform. Android brings in the power of Google in handheld devices and tablets. It has an amazingly fast browser. Android is developed by the Open handset Alliance led by Google.

The operating system used in Android is Linux. Google has done further architectural changes in the Linux Kernel which are typically outside the Linux Kernel Development Cycle. The first commercially launched Android smartphone was on HTC Dream.

Features

All android handsets are adaptable to larger VGA, 2D graphics library, 3D graphics library based on OpenGL ES 2.0 specifications, and traditional smartphone layouts. The android provides connectivity through GSM/Edge, IDEN, CDMA, EV-DO, UMTS, Bluetooth, Wi-Fi, LTE, NFC and WiMax.

Android phones are equipped with video cameras, touchscreens, GPS, accelerometers, magnetometers, dedicated gaming controls and accelerated 3D Graphics. Android phones also support multitouch.

It uses SQLite, a light weight relational database to store userâ€™s data. Android has a fast speed web-browser based on open source WebKit layout engine. Android supports voice actions for calling, texting and navigation etc. from Android 2.2. It allows wireless tethering, enabling your phone to become a Wi-Fi hotspot.

Android supports SMS, MMS, threaded text messaging and cloud to device Messaging (C2DM). Options for multitasking are available in Android. For external storage, most android phones have a micro SD slot and can read micro SD cards formatted with FAT 32, Ext3fs or Ext4s file system. Screen capturing is also possible in Android by pressing the power buttons and volume down buttons simultaneously. All these features help hoards of developers in the development of high-end Android based games and android based applications.

Uses

Android enables its users to video chats with friends and family, find fancy restaurants. Android allows users to get directions while they are travelling with the help of GPS feature. It allows users to listen to online music and view video content.

Android has been designed primarily for smartphones and tablets. The open-source nature of android allows it to be used on laptops, netboooks, smartbooks, and eBook readers and has attracted an increase in android application development and android games development over the years. The android OS finds it use in car CD and DVD players, vehicle satnav systems, refrigerators, home automation systems among others.

Security and Privacy

Unless access permissions are requested by the users, the Android operating system does not have access to the rest of the systemâ€™s resources. The Android applications run in a sandbox which is a separate area of the operating system.

Android smartphones have the ability to report the location of Wi-Fi access points. Android maintains database containing locations of millions of people by locating their smartphone devices. This feature helps users to use apps like Foursquare, Latitude, Places and also display location-based ads.

Applications

The applications on Android are usually developed in Java (programming language) using the Android Software Development Kit. Other developing tools for Android include Native Development Kit in Android for C and C++. The Android Market has been named as Google Play. Only devices that comply with Google's compatibility requirements are allowed to preinstall Google's closed-source Play Store app and access the Market. Alternatively, users can install apps directly onto the device if they have the application's APK file or from third party app stores such as the Amazon Appstore.

There are a lot of features in Android that makes it a very competitive player in todayâ€™s market. The tools for developing Android applications are available at very little or no cost which encourages developers to write Android codes. To publish your Android application or Android game you need to upload it at the Android Market.

With easy connect and share, android is reshaping the way people communicate. Android provides an open-source platform and an open market place for distributing your products. It has a large and ever- growing user base. The open platform creates room for innovation to drive mobile communications beyond.

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