

The brand of mobile phone using android os assignment



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Conclusion 15 Reference 16&17 Appendix 18-22 Executive Summary In the first place, the purpose of this assignment is to introduce about what is Android operating system. In 2005, the initial developer of the software, Android Inc acquired by Google and developed by the Open Handset Alliance led by Google.

It is an operating system for mobile devices such as smartphones and tablet computers. Google's Android delivered a complete set of software for mobile devices such as operating system, middleware and key mobile application.

The reveal of the Android distribution was on November 5, 2007 which announced with the founding of the Open Handset Alliance. This appearance carry lots of benefit to the relevant industry and consumers because Google's Android will be an open platform, robust operating system kernel, innovative library packages, ease application development, and rapid improvement.

These attractive conditions immediately raise the concern from several mobile companies such as Samsung, Sony Ericsoon, HTC and etc. Later more, these companies join this alliance to compete with Apple's iOS.

However, its appearance also brought a lot of an association of negative criticism because before the appeared of Google's Android, Apple's iOS - Google's Android biggest rival has been published. Because of this, specialist and their own supporters both discuss and compare each other product. In

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the discussion, many of the comparisons are made and advantage and weakness are found.

The comparison can be divided into ease of use, installation of application, application integration, notifications and others. Also, as for the advantage and weakness of Android also listed, they are such as the openness of Android software license, variety of application and games are available, provision of Google software and others while the weaknesses consist of high hacking risk to those devices, charge of fee by online stores or third party sites. For more details, please read the following articles I have prepared.

What is Android OS? Android is an operating system which was launched by Google. However, the initial developer of the software, 'Android Inc' was founded by Andy Rubin, Rich Miner, Nick Sears and Chris White in Palo Alto of California, U.S. in 2003. Later on, it was acquired by Google in 2005. After original release, there have been a number of updates in the original version for today. Android OS was built from the ground-up to enable developers to create compelling mobile applications that take full advantage of all a handset has to offer.

It was built to be truly open. For example, an application can call upon any of the phone's core functionality such as making calls, sending text messages, or using the camera, allowing developers to create richer and more cohesive experiences for users. Android is built on the open Linux Kernel.

Furthermore, it utilizes a custom virtual machine that was designed to optimize memory and hardware resources in a mobile environment. [1][2][5]

Android is open source comes and comes with an Android market which is an online software store.

It can be liberally extended to incorporate new cutting edge technologies as they emerge. The platform will continue to evolve as the developer community works together to build innovative mobile applications.

Therefore, countless of applications are developed by third party developers.

So that, Android market now is contain more than 200000 of lack games, application and widgets available for users. Hence, Android users are offer lots type of applications to select, and download applications and use them.

Android applications are written in java programming language.

Android is available as open source for developers to develop applications which can be further used for selling in android market. There are around 200000 applications developed for android with over 3 billion downloads.

Android relies on Linux version 2. 6 for core system services such as security, memory management, process management, network stack, and driver model. For software development, Android provides Android SDK (Software development kit). [3][4] In Q4 2010, Android was listed as the best-selling smartphone platform worldwide by Canalsys. [2] Founder ;

Background of Company

In October 2003, Android Inc. was founded in Palo Alto, California, United States by Andy Rubin (co-founder of Danger), Rich Miner (co-founder of Wildfire Communications, Inc.), Nick Sears (once VP at T-Mobile), and Chris White (headed design and interface development at WebTV) to develop.

Rubin state that, "... smarter mobile devices that are more aware of its

owner's location and preferences". In the past, Android Inc. operated secretly with just only revealing that it was working on software for mobile phones. Unfortunately, at that same year Rubin ran out of cash.

Steve Perlman brought him \$10, 000 in cash in an envelope and refused a stake in the company. A few years later, Google acquired Android Inc. in August 2005 and making Android Inc. a wholly owned subsidiary of Google Inc. Still the key employees of Android Inc. , including Andy Rubin, Rich Miner and Chris White, stayed at the company after the acquisition. [17] Of course not much was known about Android Inc. at the time of the acquisition because it was operated secretly, but many already deduced that Google was planning to enter the mobile phone market with this move.

At Google, Rubin with his teammate developed a mobile device platform which powered by the Linux kernel. Google marketed the platform to handset makers and carriers on the premise of providing a flexible, upgradable system. Google had lined up a series of hardware component and software partners and signaled to carriers that it was open to various degrees of cooperation on their part. On December 2006, according to the reports from the BBC and The Wall Street Journal noted that Google wanted its search and applications on mobile phones and they were working hard to deliver that.

Print and online media outlets soon reported rumours that Google was try to develop a Google-branded handset and some deduced that as Google was defining technical specifications, it was showing prototypes to cell phone manufacturers and network operators. Almost two and a half years later, on

November 5, 2007, Google took the mobile device world by storm again after the Apple's iOS by announcing their new Linux-based mobile handset operating system named Android. They not only introduce an entirely new mobile OS, but also announced that it was open-source which can surpass the monopoly of Apple.

This was a direct result of the collaborative efforts of the newly formed Open Handset Alliance. In order to counter the tension from Apple, several companies quitted out from Symbian or Windows and joined this alliance, such as Google, Samsung, Sony Ericsoon, Motorola, HTC, Intel, Sprint-Nextel, T-Mobile, and NVIDIA, whose goal was to create open standards for mobile devices. Later more in September 2008, the first device directly from Google was the G1 on T-Mobile which launched, and included GPS functions, a 3.1MP camera, and an array of Google apps.

This was the beginning of what was to become an exciting adventure for Google and a new generation for the entire mobile industry. [7] The brands of mobile phone that using Android OS A large no of mobile companies are using Android. The list of companies supporting Android in their hardware is [13]: Samsung Samsung Galaxy S II Samsung Galaxy Tab Sony Ericsoon Sony Ericsoon Xperia X Tab Sony Ericsson Xperia Arc Motorola Motorola Droid X 2 Motorola Xoom LG LG Optimus Black LG G-Slate HTC HTC Desire HD HTC FLYER-Fly Huawei

Huawei IDEOS X3 Huawei IDEOS S7 Cherry Cherry Magnum HD Cherry Superion Toshiba Dell Toshiba AT200 Dell Thunder Acer Lenovo Acer A1 Liquid S100 Lenovo Ophone Functions & Features of Android OS A ndroid's

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biggest advantage over iOS has been the features and with the latest release Android has almost every feature that you want, whether it is multitasking, widgets, tethering, Wi-Fi hotspot or Adobe Flash support.

It feels the most complete out of all the platforms for now in terms of features. That's why Google's Android operating system has had a fantastic year. Starting from only a mere 3.5 percent of the market until 2010, Android occurs as one of the major players in the smartphone industry with a quarter of the market under its belt. As opposed to Apple's iPhone, the Android is a more open and permits third-party manufacturers such as Samsung, Sony Ericsson, Motorola and a lot more to incorporate their software into their smartphones and tablets.

For example, iTunes is not needed to sync your music or video files and the Android operating system supports the majority of video formats, unlike the iPhone where you can only play QuickTime files. It becomes quite clear that the key advantage of the Android is automatically the immense number of applications being available and created every day. Find out in this quick article how to get the most of your Android smartphone as I would like to share some functions and features you might need to know about [10].

Android SDK The Android SDK is available for Linux, MacOS and Windows.

It contains an emulator with the surface of Android to try applications. After unpacking the SDK, the emulator can be found in the subdirectory "oolsemulator.exe" that shows at a HTC Smartphone with keyboard.

Standard programs for e-mail, SMS, contacts, calendar, road maps, internet browser and others are preinstalled. The Android SDK includes a

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comprehensive set of development tools such as a debugger, libraries, and a handset emulator. Software written in Java can be compiled to be executed in the Dalvik virtual machine, which is a specialized VM implementation designed for mobile device use.

Facebook released a new SDK for android which supposed to be superior than the SDK for iphone. [19] Features The points below show the software that can support out of the box: [20] * Application framework : enabling reuse and replacement of components * Dalvik virtual machine : optimized for mobile devices * Integrated browser based on the open source WebKit engine * Optimized graphics powered by a custom 2D graphics library; 3D graphics based on the OpenGL ES 1. 0 specification (hardware acceleration optional) * SQLite for structured data storage Media support for common audio, video, and still image formats (MPEG4, H. 264, MP3, AAC, AMR, JPG, PNG, GIF) * GSM Telephony (hardware dependent) * Bluetooth, EDGE, 3G, and WiFi (hardware dependent) * Camera, GPS, compass, and accelerometer (hardware dependent) * Rich development environment including a device emulator, tools for debugging, memory and performance profiling, and a plugin for the Eclipse IDE C/C++ function libraries of the Android OS [18] * Surface manager for 2D and 3D even overlay display System C library, specialized for Linux-based devices (BSD implementation) * SGL, 2D graphic system * 3D libraries, based on OpenGL ES 1. 0 APIs with hardware or software accelerated 3D display * Media libraries for playback and record of audio, graphic and video formats (MPEG4, H. 264, MP3, AAC, AMR, JPG, PNG) * LibWebCore : Android internet browser * FreeType : for representing of bitmap and vector fonts * SQLite : an efficient and slim relational database

for all applications Advantages and Weakness of Android OS There are several types of cell phone platforms to choose from today.

Smart phones have become phones that many people have versus just professionals like and it was just a few years ago. Among these platforms, one that you can see is Google's Android phone. This has become a fairly popular phone after the Apple iPhone, which offers some advantages because Google Android is open source software and Android has almost every feature that you could want, whether it is multitasking, widgets, tethering, Wi-Fi hotspot or Adobe Flash support. The point given below has showed the advantages of Google's Android derive from being open source software. The advantages include: 1.

First, it's an open platform. It means that its code is available for people to look at. Generally, open source projects are quite innovative and hence it will give users quality features since anyone can program them into the system. [16] 2. Next, the ability for anyone to customize the Google Android platform will open up an applications playing field which can benefit to weak and small players who lack of financial because they will having a wide range of mobile applications to select since the monopoly of wireless carriers like AT; T and Orange is broken by Google Android. 8][16] 3. Furthermore, for the mobile phones carrying Google's Android, companies will come up with such innovative products like the location- aware services which will provide users with any information they may need. This information could include knowing the location of a nearby convenience store or filling station. Besides, the entertainment functionalities will be taken a higher grade by Google Android

being able to offer online real time multiplayer games. [8] However, Google Android still may likely have some problems as well.

These problems might include rejection by carriers who need to charge a fee for some of the web based applications which Google Android enable mobile phone holders to access free of charge. Also, since Google Android is an open source platform driving all Android phones, it could cause a significantly rise in risk of hacking these devices. [8] Comparison of Operating Systems Today, over half a dozen platforms out there with hundreds of different models between them, priced very close to each other.

It doesn't help matters when several phones are identical to each other but simply running a different brand of operating system. You can decide any type of model and features you want in your phone but there is no way you can choose operating system between them looking at the spec sheet alone. Being in a position where I get to use the latest smartphones on different platforms or operating systems. What follows is a brief comparison of the top smartphone platforms today - Android OS ; iOS where I try to find out which one is the best, ultimately narrowing down you number of options. [15]

Installation of Apps Apps installation is a gentle by using Android. Using your smartphone, search for the app on Android Market or on a third-party site such as AppBrain, click the Install button, and installation complete, that's it. For the iPhone, the commonly used method for installing an app is to link your phone to iTunes (which needs to be installed to your computer), look for apps, and download the app from App Store to your computer. Actually, the

iPhone or iPad will not function without chaining them to iTunes, and you still need to sync your iOS device to get things functioning.

Besides, there is another way and it's similar to Android's over-the-air installation of apps. But, for this method to work, users still need either an iPhone 3G, a first-generation iPhone, or an iPod Touch. Your device must be running at least iPhone 2.0. [6][14] App Integration Most of the great apps on iOS are already available on Android but the Google's own apps iOS is not available. By using Android smartphone, SMS, phone features, and voicemail on would be hassle-free with their real app integration. Such integration is hard to come by on an iPhone.

Take the case of Google Voice, even it's been ported to the iPhone, but it just couldn't work as smoothly as in an Android phone. The usual behaviour of iPhone apps is to direct the user to the default dialler or voicemail apps whenever the user has to call or listen to voicemail. Hence, if an iPhone user wants to use Google Voice full-time on an iPhone will have to take extra steps just to reach the Google Voice app while Android-phone users just need to spend a very small fraction of the time that takes by an iPhone user to make Google Voice calls.

The reason is Google Voice on Android smartphones can integrate straight away with the operating system. Thus, calls you want to make through Google Voice will always be made via Google Voice. Contacts that users click on their browser or in Google Maps will always go through Google Voice rather than be redirected to a different dialler application. [12][14] Ease of use According to the website, iOS has turned out to be the easiest mobile

operating system, because everything was so clear and obvious for those who just beginner, regardless of age, every consumer could figure it out without having to refer to a manual.

The reason for this is it does not assume that the user knows how to use it and because of this users can go around doing basic things without any help. It is incredibly presentative and makes you wonder why no others figured out a way to make their software work this way before. Design a good looking interface is one thing but designing a good looking interface with also easy to use is another and no one does this better than Apple. Next in line of intuitiveness is Android. Even though Google's Android may look great and try to make the UI user friendly but it isn't the best when it comes to user friendliness.

There are some things that aren't immediately apparent, such as the fact that there are so many different types interface layouts on different devices and it's make consumers confused, which means if you are someone who's not a geek and are used to, say, an HTC Android phone, you will be lost when you pick up a Samsung Android phone. Unlike iOS, you do not have to worry about different interface layouts on different devices. Unfortunately, Android OS does not have the same level of simplicity as iOS, but it is still very easy nonetheless. [9] Better Notifications Phone has some problems with its notifications. Since pop-up notifications are limited, the iPhone can only take once at a time, and because of the absence of multitasking functions, iOS users have to open the apps in order for them to display notifications.

Oppositely, Android has a convenient notification bar which shows an icon for each notification waiting to be viewed. Also, the notification bar can be <https://assignbuster.com/the-brand-of-mobile-phone-using-android-os-assignment/>

dragged downward to show more details about the notifications. Android also enables app developers to make notification details accessible from the lock screen.

Furthermore, this ability available even to non-native Android apps is something that the iPhone provides only to its native apps. Android deals with this way much better compare to the way that iOS deals with multiple push notifications is. In fact, a very common complaint from iPhone users and developers alike because there are a pile of notifications and they not being able to know which app each one came from. [14] Conclusion In conclusion, there are several types of cell phone platforms in the market today.

Among these platforms, one that you can see is Google's Android phone. This has become a fairly popular smartphone after the Apple's iPhone. However, Google is much greater than Apple because Android OS comes preinstalled with many mobile Google apps such as Google Maps, Google Goggles, Google Places, Google Navigation beta and etc. This will be the reason Android smartphones thrive in today's market due to their open nature and hundreds of possibilities of new and exciting applications and functions waiting around the corner.

Furthermore, we can easily see that Android has come a long way since its early days of 2005 and earlier: from just a " notion" in the mind of Andy Rubin back in 2003 about what a device should offer, to Google's acquisition of Android in 2005, along with the most recent advancements of the OS, and the screamingly fast pace of new device releases. All of this has set us on a

very exciting ride with Android. One can only expect that this trajectory toward becoming the number one mobile OS in the world will continue. Or we just imagine where this journey will take us in the future. Reference .

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Every Dalvik application is executed in a Dalvik VM of its own. Applications can access all equipment functions. This makes it possible for the programmer to make innovative programmes which offers the user high value by the combination of all sorts of data sources with the equipment functions. The Eclipse IDE with an official plugin is used for the development. The operating system Android for Smartphones is supported by the Open Handset Alliance. Including more than 30 communication provider, equipment and semiconductor manufacturers as well as software companies.

Because Android is an open platform in the meaning of the software and product development the source code shall be available completely at a later time and is in opposite with the market leading closed operating systems

Symbian, Palm OS and Windows Mobile. Android include C/C++ function <https://assignbuster.com/the-brand-of-mobile-phone-using-android-os-assignment/>

libraries used by different parts of the operating system. * Surface manager for 2D and 3D even overlay display * System C library, specialized for Linux-based devices (BSD implementation) * SGL, 2D graphic system * 3D libraries, based on OpenGL ES 1. APIs with hardware or software accelerated 3D display * Media libraries for playback and record of audio, graphic and video formats (MPEG4, H. 264, MP3, AAC, AMR, JPG, PNG) * LibWebCore, Android internet browser * FreeType, for representing of bitmap and vector fonts * SQLite, an efficient and slim relational database for all applications

The Android SDK is available for Linux, MacOS and Windows. It contains an emulator with the surface of Android to try applications. After unpacking the SDK the emulator can be found in the subdirectory "tools\emulator.exe" that shows a HTC Smartphone with keyboard. Standard programs for e-mail, SMS, contacts, calendar, road maps, internet browser and others are preinstalled. The first Google Android Developer Challenge (ADC) started in April 2008 for engaged programmers to realize and present ideas. Approximately 1, 800 programmes were submitted and 20 honoured with a prize money under the best 50. Part of the best applications are for example cab4me by combination of Google Maps, GPS signal and a database to send a taxi in the simplest mode by click to the current position on the map.

Or GoCart which reads the bar code of goods with the mobile telephone camera and looks over onlineshops and registered shops in the circumference for the best price. What Are The Advantages Of An Android Phone? Google creates a sales platform for Smartphone applications with Android Market. At first the market place is provided free of charge. The first Android mobile telephone comes from the taiwanese manufacturer HTC with

the T-Mobile G1 smartphone starting at October 22nd, 2008 in the USA and at the beginning of 2009 in Germany.

There are many different cell phone platforms to choose from today. Smart phones have become phones that many people have versus just professionals like it was just a few years ago. One platform that you can look into is Google's Android phone. This has become a fairly popular phone in the last year which offers some advantages. First of all, it's an open platform. This means that the project is open source meaning that its code is available for people to look at. Generally speaking open source projects are fairly innovative and will give you quality features since anyone can program them into the system. As an open platform phone, this means that you can use this type of device on multiple networks. There is an Android phone available on most popular networks today. If you switch from one to another, you will be using something that you are used to without having to make a complete change. Android allows third parties to make applications for the phone that can be installed by anyone. There are many platforms where developers must get permission before you are allowed to install the software.

This phone gives you the freedom as a user to choose which software you want to install or not. An Android phone is guaranteed to work with Google products. There are many different Google products that most people use. Whether it's Youtube, Gmail, Google Docs or others, these will work on this phone giving you access to a wide variety of applications that you can use between your phone and your computer. Eventually this platform will work on netbook and computers. This means that you could have devices that

share the same platform giving you the ability to purchase applications that will work on all your devices.

What it really comes down to is if you like this device or not. Try one out and see if it fits your needs. If you enjoyed this article and would like to read more articles from this author. Then head over to his latest website on outdoor heat lamps where you can read about Bernzomatic patio heater. Google: 3 Billion Android Apps Installed; Downloads Up 50 Percent From Last Quarter On Google's earnings call today, Jeff Huber, Senior VP Commerce and Local, revealed that there have been over 3 billion Android apps installed. And downloads of Android apps are up 50 percent from Q4 2010.

Huber also mentioned that 350, 000 Android devices are being activated per day, a data point which was revealed this past week. In terms of breaking out share by device and market, Huber said the company doesn't reveal these numbers. But he did say that with device partners, there is strength in U. S. , Japan, Korea, and Europe specifically. He added that international is growing as a whole in terms of Android usage. To put the 3 billion stat in perspective, Apple just passed 10 billion app downloads in January. But thanks to the fast growth of the sale of Android phones, Google's app downloads are growing fast.

The first billion installs took 20 months, the second billion installs took another 5 months, and the third billion took only 2 months. I'm guessing the 4 billion mark will take less than It's also important to note that because of Google's open platform, Android users can download apps from a number of

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marketplaces, including Google's Android Market. Amazon just launched an Android App Store a few weeks ago. What's also unclear how many of these apps installed were free compared to paid apps. We've heard in the past that more Android apps are free compared to Apple's apps.

In the Q; A portion of the call, Huber said there are many exciting products and innovation coming along to the Android platform, but didn't reveal any specifics. In the call, CFO Patrick Pichette commented that the Android platform is growing "amazingly blazing" and that Google stumbled into a billion dollar business with respect to Android and mobile. Advantages and Disadvantages of Google's Android Smart Phones December 28th, 2008 | Camera Phones, Google Android, HTC, Mobile Phones, Wireless Devices
Google Android is open source software.

In theory this means that the Google Android software platform will have a competitive advantage over other operating systems like Symbian, Microsoft mobile or Blackberry. There are a host of advantages that Google's Android will derive from being an open source software. Some of the advantages include: 1. The ability for anyone to customize the Google Android platform will open up the applications playing field to small and new players who lack the financial muscle to negotiate with wireless carriers like AT&T and Orange.

The consumer will benefit from having a wide range of mobile applications to choose from since the monopoly will be broken by Google Android. 2.

Although this will depend on the carrier, one will be able to customize a mobile phones using Google Android platform like never before, right down

to the screen. Features like weather details, opening screen, live RSS feeds and even the icons on the opening screen will be able to be customized.