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Development of android application services at Arokia and its architecture

Dr. Amit Sharma
Professor, Department of Computer Science & Engineering, Vedant College of Engineering & Technology, Bundi, Rajasthan, India

Abstract
This is a research paper on Android Application Development Services at Arokia and Its Architecture it is basically come in market for many valuable thinks it to behind the Android development Smart phones have changed the definition of mobile phones by being a powerful communication tool inevitable in our daily life along with varied options for fun and entertainment. It has now become a very common tool because of the popularity of android system in the electronics market. As it is an open source and some of the development tools are free, there are plenty of applications, especially related to entertainment and socializing generated, which inspires people to use it. The very convenient hardware platform is also a boon for developers so that they can spend less effort and time to realize their ideas. All these make android on demand and can get further development.

Keywords: android, smart phones, java, eclipse platform, android ADT, android SDK

1. Introduction
Android is the first step in the vision of creating a better mobile phone. It is a complete open mobile platform software stack recently release by Google. Android can be run on mobile devices from companies that have come together to form the Open Hands*et al*liance.
The Alliance currently consists of 34 companies including Motorola, T-Mobile and Sprint-Nextel. These companies have agreed to open access devices. This basically means that I, as a customer, can purchase a Motorola phone with service from one cellular network then later switch carriers but keep the same phone!

Fig 1: Android main icon

Android would run on Open Hands*et al*liance devices. It includes an operating system, middleware and key applications such as email client, calendar, maps, browser, and contacts. It also takes the basics one step further by merging contacts with maps.
For example, if you have a contacts' address stored on you mobile device you can bring up that location on a map with one click of a button. No need to open a browser, navigate to Google maps or MapQuest, type in the address and wait for it to load. What's even more exciting about Android is that it is an open platform. You can liken it to Linux. What's nice about this is that it's customizable and modifiable. If you think, hum it would be cool if my PDA could perform X-Function; you have the capability to develop X-Function.
You are not running a platform that prefers to keep you hands tied. You can also be assured that there will be a lot of cool and innovative tools to download for free.

1.1 What is android
Android is an operating system for Mobile phones. I will explain more about this in the later part of this article. Lot of advances can be seen these days in the field of smartphones.
As the number of users is increasing day by day, facilities are also increasing. Starting with simple phones which were made just to make and receive calls.
Now we have phones which can even access GPS, GPRS, Wifi, NFC. and lot of other cool and advanced features which you cannot even imagine.
So in this Mobile world of this complication. Android is one of those operating system platforms which made it easy for manufacturers to design top class phones.

Fig 2: Represent the Android

2. Advantages and Disadvantages

Advantages

1. Android can Run Multiple Apps at the Same Time.
2. Android keeps information visible on your home screen. Android has is a customizable home screen which keeps active widgets right at your fingertips, always accessible and always visible – without having to launch an application first.
3. Android has a better application market compare to Apple's App because Apple's App store has over 180,000 applications, while the Android Marketplace has only just broken the 50,000 mark
4. Android gives you better notifications compare to iPhone because iPhone has some trouble with notifications. Because it's restricted to pop-up notifications, it can only handle one at a time
5. Android is Hardware independent.
6. Android lets you install custom ROMs.
7. You can change your settings faster in Android. iPhone users are stuck digging around in the system settings every time they want to use the internet or a Bluetooth device. Android lets you use widgets to manage your settings directly from your home screen.
8. Android does Google and Social Integration but The iPhone can do this only through use of third party apps, and is nowhere near as seamless to use as the Android alternative.
9. Android gives you more options to fit your budget. Of course these are lower end Android devices, but they are still comparable in performance to the iPhone 3GS.
10. Innovative products like the location-aware services, location of a nearby convenience store etc., are some of the additive facilities in Android.

Disadvantages

1. Connected to the Internet: Android can be said is in need of an active internet connection. At least there should be a GPRS internet connection in your area, so that the device is ready to go online to suit our needs.
2. Sometimes slow device company issued an official version of Android your own.
3. Android Market is less control of the manager, sometimes there are malware.
4. As direct service providers, users sometimes very difficult to connect with the Google.
5. Sometimes there are ads: because it is easy and free, sometimes often a lot of advertising. In appearance it does not interfere with the performance of the application itself, as it sometimes is in the top or bottom of the application.
6. Wasteful Batteries, This is because the OS is a lot of "process" in the background causing the battery quickly drains.

3. Applications in android

Android initially came into existence with the sure fire idea that developments are given the power and freedom to create enthralling Mobile applications while taking advantage of everything that the mobile handset has to offer.

Android is built on open Linux Kernel. This particular software for Mobile Application is made to be open source, thereby giving the opportunity to the developers to introduce and incorporate any technological advancement. Build on custom virtual machine android gives its users the addition usage and application power, to initiate an interactive and efficient application and operational Software for your phone.

Google's mobile operating device, the android is its awesome creation in the definitive creation of Software Applications for the mobile phone arena it also facilitates the g-juice in your mobile thus initiating a whole new world of Mobile Technology experience by its customers.

We at Arokia IT are technically equipped to initiate any level of these amazing software applications using the android genius from Google. Around in the year 2007, Google announced its Android Operating System and Open Hands*et al*liance with these two major contributions to the mobile industry that ultimately changed our experience with mobile interface.

3.1 Open hands*et al*liance

Open Hands*et al*liance is an amalgamation of Tech Companies with common and particular interest in the mobile user enhancement experience. Companies like Google, HTC, Motorola, Samsung, Telecom Italia, T Mobile, LG, Texas Instruments as well as Sony Ericsson, Vodafone, Toshiba and Hawaii are Tech giant based on their core abilities and strengths, while keeping and pursuing the characters and goals of each company, their basic idea of this joining of hands was the feature-rich mobile experience for the end user.

This alliance meant the sharing of ideas and innovation, to bring out these ideas into reality. This provided the millions and millions of Mobile users the experience that they never had.

Like the Apple iPhone, Android Operating System allows third party developers to innovate and create Applications and software for mobile devices. Android is an open, flexible and stable enough to associate itself with newer and newer evolving Technologies.

Android's vast range of easy to use tools and wide range of libraries provides Mobile Application developers with the means of an amazing mobile operating software to come up with the most efficient and rich Mobile Applications changing the world of millions of mobile users.

3.2 Android application development services at Arokia

We provide a comprehensive suit and comprehensive assistance in the development of mobile application on the Android Platform to our prestigious customers. Our experts are veterans in the Java programming language and are capable to exhaust any challenge to develop feature-rich android application services.

Java Programming Language is used as a basic building block and back bone for Android Application Development that allows developers to program comprehensive application on Java that runs on Android Mobile.

Android's vast range of easy to use tools and wide range of libraries, provides Mobile Application Developers with the means of an amazing mobile operating software to come up with the most efficient and rich Mobile Applications. Our development team has complete resources and technologies to

make use of in developing the most acclaimed applications.
Among the various Application categories developed by us on the android platform, some of them are; Communication Application, Business Application, Multimedia Application, Internet Application, Fun/Entertainment Application, Gaming Application, Utility and Security Application.
We program these Applications on the customized demands of our clients. We ensure them that these specifically designed apps on the android platform are solely designed for their specific user defined criteria.

3.3 Hire android developers at Arokia

Our sound and capable Android programmers have exhibited their expertise on the global podium in the following skill sets like the Android's Applications Framework, Android Dalvik Virtual Machine, Data Storage and Retrieval using SQLite, XML, web-services, Handle Media Support for audio and video, GSM, 3G and Wi-Fi, Bluetooth, Edge GPS, Compass and accelerometer Screen Elements like View-groups, Views, Tree Structured UI, Layout and many more such android services to offer our client.
Our sound and capable Android programmers have exhibited their expertise on the global podium in the following skill sets like the Android's Applications Framework, Android Dalvik Virtual Machine, Data Storage and Retrieval using SQ Lite, XML, web-services, Handle Media Support for audio and video, GSM, 3G and Wi-Fi, Bluetooth, Edge GPS, Compass and accelerometer Screen Elements like View-groups, Views, Tree Structured UI, Layout and many more such android services to offer our client.
You will find Arokia as a one-stop source for all your functional needs while creatively unfolding the true potential and breadth & depth of imagination by our passionate programmers and designers.
When you hire our Android developers, you ensure yourself with the most valued and exquisite mobile applications. Our developers can help you eliminate all types of potential risks and gain competitive advantages through their technical expertise.

Fig 3: Applications in Android

4. Architecture of android and future aspect

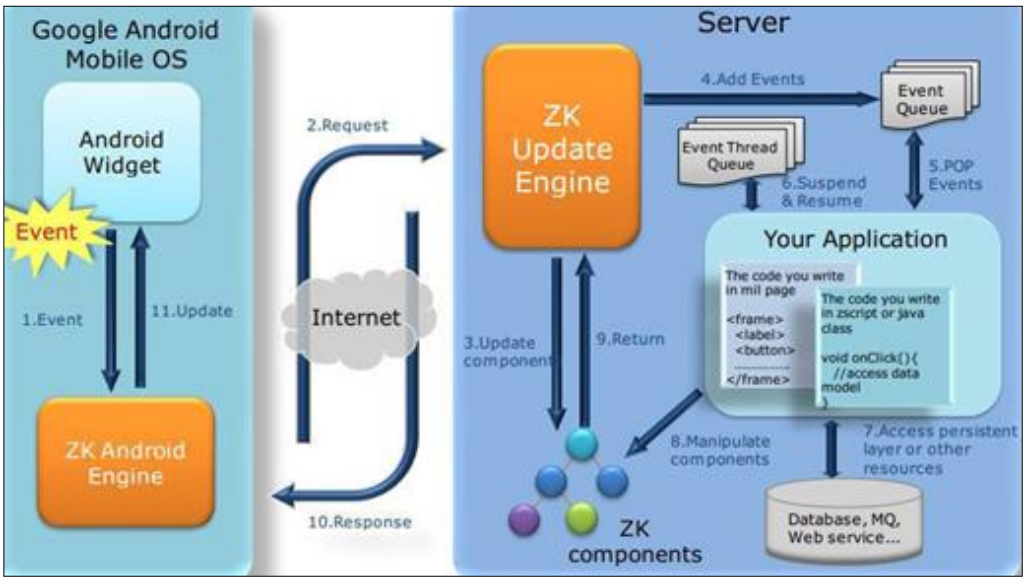

Fig 4: Architecture of android

Future Aspects I'm just curious to what you guys think the future of Android will be like, especially after Apple won their lawsuit with Samsung. With that lawsuit, and Adobe eliminating Mobile Flash, I am less optimistic about the future of Android than I have ever been. The lawsuit could dramatically impact the design of Android (of course we will still have launchers to make our phone look how we want).
A future change in the basic design could dramatically hurt Android. The current Icon setup is the most popular for users (Windows, Macs, iPhone, Android) but if that were to change, people may not want to keep buying Androids. Personally, I hope Samsung is able to sue Apple when the mini iPad comes out for design patents. Since Apple was able to win a rectangle with rounded corners, why can't Samsung win the 7inch design? The mobile war lawsuits are silly and will cause all of us to pay more for future Smartphones. Then add that along with the elimination of Mobile Flash, which was a major advantage that Android had over iPhone. This is a bigger issue than just online video. Some businesses use flash for their employees to access their work material. Some

colleges use flash on their websites so their students can access the course material. Personally, I go to online college and my classes are flash websites.

With the elimination of Mobile flash, that will cause many of us to not be able to access our classes from our phones. The whole thing with HTML5 taking over is years from taking place, with many of the bigger video sites not planning on going to HTML5. While Mobile Flash wasn't perfect, it was usable for many of us. Without Mobile Flash moving forward, for some of us, updating our phones or upgrading our phones for new ones will cut down on our productivity.

I'm personally sad that I couldn't keep ICS on my Bionic due to Flash not working for me. My need for flash is too great. I'm always accessing my course work from my phone and eliminating flash makes that not possible. Unfortunately, I need my phone to be as useful as possible and eliminating things that I can use it for just doesn't work for me. While not everyone needs flash, many do. For those of us who do, future devices won't be an option, nor will future updates to our phone. My college has an iPhone app, but not an Android app so if push came to shove, I may have to switch to an iPhone (yuck) just to be able to stay productive.

5. Conclusion

Android has been criticized for not being all open-source software despite what was announced by Google. Parts of the SDK are proprietary and closed source, and some believe this is so that Google can control the platform. Software installed by end-users must be written in Java, and will not have access to lower level device APIs. This provides end-users with less control over their phone's functionality than other free and open source phone platforms, such as Open Moko.

With all upcoming applications and mobile services Google Android is stepping into the next level of Mobile Internet. Android participates in many of the successful open source projects. That is, architect the solution for participation and the developers will not only come but will play well together.

This is notable contrast with Apple and other companies, where such architecture of participation is clearly belated.

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