iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 2 **Issue:** X **Month of publication:** October 2014

DOI:

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

ISSN: 2321-9653
International Journal for Research in Applied Science & Engineering Technology(IJRASET)

Android and Its Application – 'Greetings'

Anshul Patro[1], Vineet Kataria[2]
[1,2] Electronics & Computer Engineering, Dronacharya College of Engineering, Gurgaon, Haryana, India

Abstract— The paper basically deals with the brief study of Android and its various application. This paper covers various basic topics related to android and it's working.
Key Terms-Linux Kernel, Versions of Android, Four Layers of Android, Advantages and Disadvantages.

I. INTRODUCTION

Android is an operating system developed specially for mobile devices to make them smarter. The literal meaning of Android is "A big man in a small package" or we can say that we can connect multiple pages through a concept of polymorphism via a single key named "Button". The Android operating system is very much similar to Linux operating system which created a boom in market.

II. OPERATING SYSTEM

An operating system acts as interface between hardware and software so that user finds it compatible to use both together. Operating system can be defined as collection of software that is used to serve the real-time purpose of the user in order to meet his demand and make him more and more compatible to the system. It provides us with an environment by which we can interact with the hardware and software components of our system. Some common operating system used are: Android, BSD, IOS, LINUX, MAC OS,IBMz/OS.

III. HISTORY OF ANDROID

- Android was given birth in Palo Alto, California, United States in October in 2003, altogether by its creators Andy Rubin, Rich Miner, Nick sears and Chris white .Google found the operating system quite interesting and asked to purchase it.
- But the co-founders refused to give because android was an open source and if Google would buy it, Android would become a close source.
- Google again went in 2005 with a proposal of simulation and asked to give them the operating system and assured them that android will always be open source.
- Google Inc. had the authority over the software as he purchased the initial developer of the software, Android Inc. in 2005.

IV. WHAT ANDROID ISN'T

- A Java ME implementation: There is misconception which runs in the mind of various Android users which we want to clear using this paper that Android applications are written using the Java language Platform, but they are not run within java ME virtual machine, and Java-compiled classes and executable will not run natively in Android [4].
- Android is a part and parcel of Linux phone standard Forum (LIPS):Android operating system basically runs on a very different concept that is it is an open source Linux kernel but their goals are quite similar. Its complete software stack is an identical approach that goes much further beyond various defined standard organization [4].
- Android is basically a simple application layer (like UIQ or S60) :There is a very special thing about android that while it includes an application layer but Android also describes the entire software stack which holds beneath it various things like encompassing the underlying operating system, various API libraries to hold the functionality well updated, and the application itself [4].
- A mobile phone handset: Special feature of android which has created a great boom in market for its upcoming demands in various Smartphone's is that android operating system is compatible with variety of hardware resources there is no particular "Android phone" as we have iPhone to run IOS. Android has been designed
- Google's answer to the iPhone: Albeit a brand's name speaks for it but Apple's only and the biggest drawback which cannot be neglected in any case is that it's not an open source. It's a known fact to everyone that to stand a great position in market one has to stand out of the crowd. Android grabbed its position by making its operating system an open source

where users from every nook and corner of the world have access to it and can develop their own applications to ease their lifestyle.

Android is made up of several necessary and dependent parts including the following:

- The operating system consist of a hardware reference design that describes all the compatible features required for a mobile device in order to support the software stack.
- Operating system also comprises of a Linux operating system kernel that helps to provide the low level interface that are compatible with the hardware, memory management, and process control which are all optimized for mobile devices.
- Includes on open source library for developing application of our own choice. These library include SQLITE, Webkit, OpenGL and a media manager[4].

V. VERSIONS OF ANDROID

- *Android 1.0 (API level 1):* The first android launched in the competing market was Android 1.0API and it was first designed for HTC dreams.
- *Android 1.1 (API level 2):* The next version for HTC Dream was then launched on 9th February 2009, Android 1.1. The updated version of android i.e.Android 1.1 was known as "Petit Four" internally but this name was not used officially. The updated version of HTC Dreams had many new features like resolved bugs, changed android API and added a number of feature to HTC Dream [3].
- *Android 1.5 Cupcake:* Android 1.5 the updated version of Android 1.1 was launched in market on 30 April 2009, the Android 1.5 based on Linux kernel 2.6.27. The version officially used a codename based on a dessert item ("Cupcake"),it was a theme which would be used for all releases hence forth. The version was thrilled with several new features and UI amendments [3].
- *Android 1.6 donut :* The updated version of Android 1.5 i.e.Android 1.6 came up with many exciting features which includes a redesigned search framework which helps to navigate in quickly, efficiently, consistently way to users to search across multiple sources like browsers bookmarks and history, contacts of users, as well as helps navigate the web directly from home screen
- *2.0/2.1(Éclair):* Éclair is the initial version of Android which revamped the user interface and introduced HTML and exchanged Active sync 2.5 support,But was very poor in terms of speed which was a great factor which led to introduction of further versions.
- *2.2(Froyo):* Froyo is a next version of android which introduced speed improvement with JIT optimization and chrome V8 JavaScript engine. Froyo also helped supporting WIFI hotspot and Adobe flash support. Froyo came up with speed improvement but did not have a interactive interface
- *2.3(Ginger bread):* Ginger Bread the next special version of android which happened to be emerged with some new features like redefined the user interface , improved the soft keyboard and enabled copy/paste feature .Ginger bread provided support for near field communication attracted the market for its uplifment.
- *3.0(HoneyComb:):* Honey comb an advanced version of Ginger Bread which came up in a tablet oriented release which supported larger screen devices and introduced in it many new user interface feature. Some features which attracted many users were that it supported multi core processor and hardware accelerator for graphics.
- *4.0(Icecream sandwich*)::Ice cream sandwich is the latest version of android which created a boom in the market and many smart phones supported this version which offered the platform for the following interesting and innovative features like easy multitasking, rich notifications, customizable home screens, resizable widgets, and deep interactivity , adds powerful and new ways of communication and sharing. These features gave a new shape to the image of android as it came up with ways that helped in connecting and bringing people more close to each other in order to make world a single unit to live in.
- *4.2(Jellybeans)::*Jelly beans is advanced version of android which provides a platform for the Enhanced features like Photo Sphere and a completely redesigned camera app, also provides with new Gesture Typing keyboard , in addition to these features it supports in sharing some new realistic features like fast, fluid, and smooth. One of the enhanced feature moving between home screens and switching between apps is effortless, like turning the pages of a book was first ever seen in this version of android.

VI. APPLICATIONS

Android consist of a set of core applications including an email client, SMS program, calendar, maps, browser, contacts and some more interesting applications which provide various services doorstep to the Android users.

VII. APPLICATION FRAMEWORK

Android is an open source platform as Android offer developers a platform to create their own apps which are extremely rich and innovative. Android operating system are free to take advantage of the following features like access location information, run background services, set alarm, add notification to the status bar and more exciting things that the user wish to impart in their application [5].

VIII. LIBRARIES

Android includes a set of C/C++ libraries used by various component of the android system.
Some of the libraries are listed below::

A. System C library
B. Medical libraries
C. SGL-the underlying 2D graphics engine
D. 3D libraries –an implementation based on open GL
E. SQLite- a powerful and lightweight relational database engine [2].

IX. LINUX KERNEL

Android relies on Linux version 2.6 for core system services such as security, memory management, process management, network stack, driver model[2].

X. WHY TO OPT FOR ANDROID

- *Innovative*: Android operating system when entered the market created a boom on its arrival and became famous among the masses for its innovative apps that it matched the apple OS standards and was able to fulfill customer satisfaction to a high extent.
- *Speed:* Android operating system is very much known for its speed as because of its speed the android phones were known as “SMART PHONES”. Android also came up with 4G smart phones. After that the Android operating system came up with bigger RAM which was comparable to IPHONE.
- *Price:* Though the iPhone was boom in the market but IPhone smartphone had high price, because of this reason Android grabbed its existence in the competing market and slammed the doors of various already existing operating systems. Android Smartphone’s prices ranges from cheap ones up to expensive ones. The variety in the prices of the Android phones provided them a great advantage over iPhone.
- *Google Map Application:* The users have always been attracted by application like these. TheAndroid operating system smartly understands the need of its users. Accordingly, it offers Google Map as an atomic, reusable control for use in one’s applications. It also provides the Map View widget that lets you display, manipulate and annotate a Google Map within one’s activities to build map-based applications using the familiar Google Map interface.
- *Background services and application:* these services let the users create by themselves the applicationsthat work on the idea of using an event-driven model, which works silently when various other applications are used simultaneously. It provides a wide range of application that offer services like tracking the stock market, also alerting the user for the significant changes in one’s portfolio as and when required.

XI. DISADVANTAGES

- The biggest drawback that android users face is that about the memory utilization as the memory card is unable to install the java enabled system creating the problem for the users which leaves them with no option but to download the application direct onto their own phone’s memory creating crisis for space.
- A major disadvantage is battery backup is poor. It drains off the battery too early which obstructs the long time usage requirements of the users creating problem for users to comply with their cell phones.

XII. About The Application

This application allows you to wish your loved ones on every occasion without any late or delay.Basically this is designed for celebration and expressing your feelings on event of wishing.Application provides you the interface with the cordially written message for all festivals.

Software Requirement:-
The application needs software ECLIPSE, JDK and SDK.

Hardware Requirement:-
Space Requirements: 315 MB available hard disk space
Memory Requirement: Minimum of 256 MB for Eclipse 2.x and 512 for Eclipse 3.x - Recommended 1GB of memory for best performance
Optimized command line for launching Eclipse: eclipse.exe -vmargs -Xms128M -Xmx512M -XXPermSize=64M -XX:MaxPermSize=128M.
Must have Full JDK 1.4.1 for Eclipse 2.x, 1.4.2_5 for Eclipse 3.1.x, and 1.4.2_5+ or 1.5.0_5+ for Eclipse 3.2[1]

Interface Of The Application:-
Index page of the application is designed so
That it contains predefined names and predefined processing of greetings for all the festivals(we have included eves like New Year, Lohri, Holi, Eid, RakshaBandhan, Diwali, Birthday). You can select from any of the festival from the given list by just touching the field of that festival and send greetings instantly.
Processing of touching :-
Behind the fields of each festival we have inserted by designing a touch button as you see in your android touch phones. These buttons are registered for the interface with the application.

Index Page Of The Application:-
This index page allows you to access the complete Application.

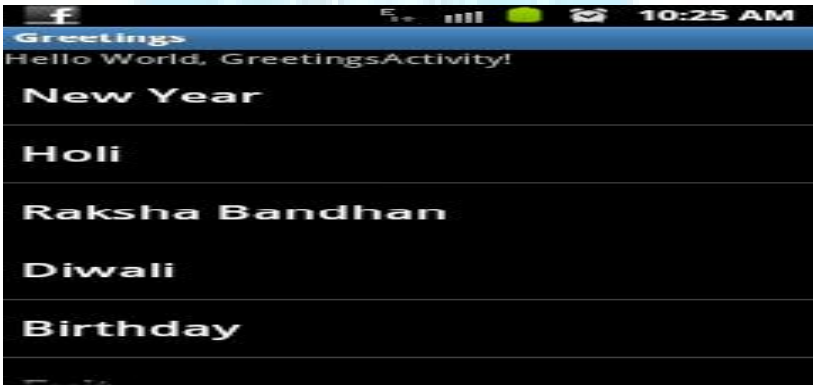


Figure 1. Index Page of the Application

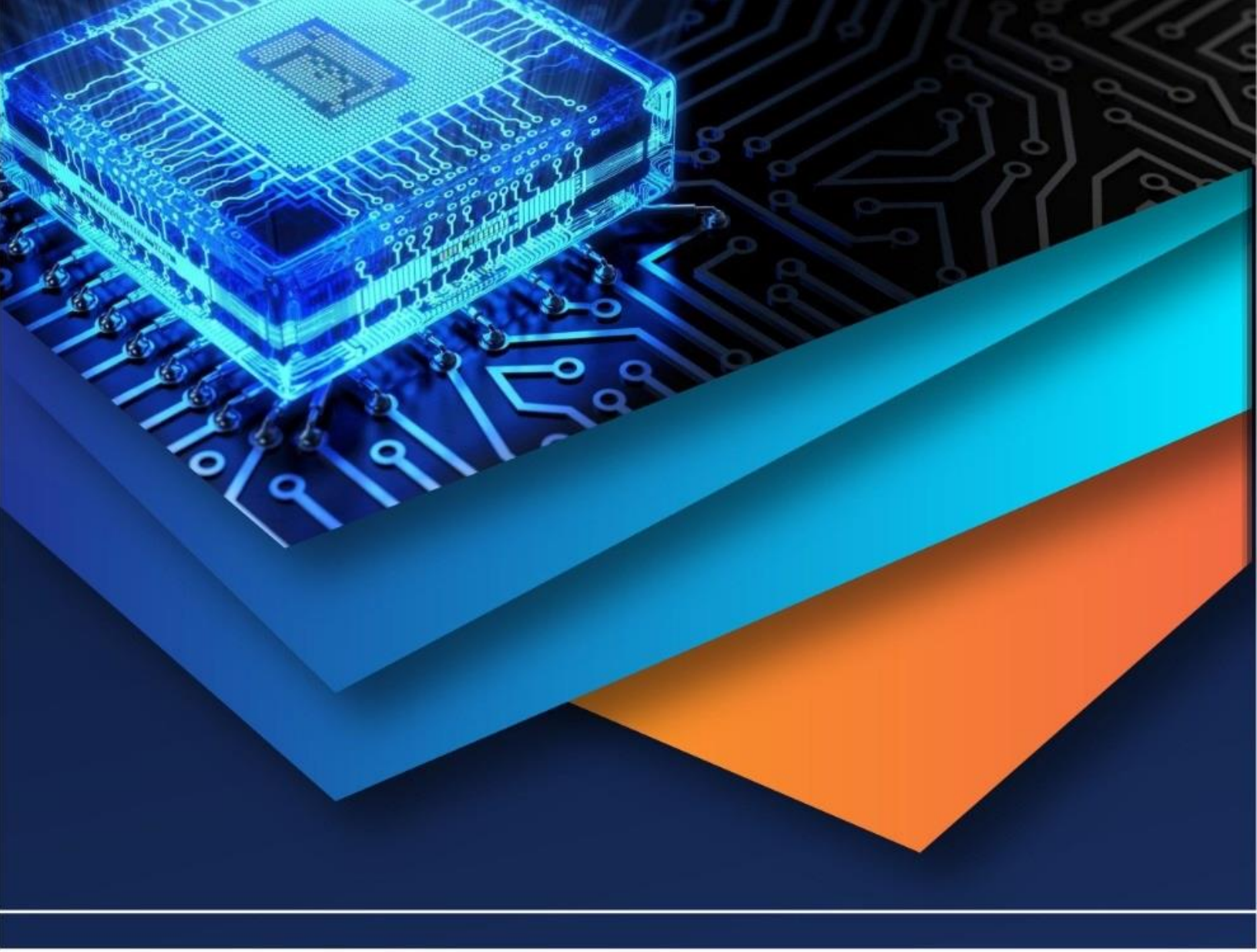
This page comes next to the index page on this applications allows you to send the message to the recipient by entering the number in phone number field and the text is already written for you send.



Figure 2. New Year Intent Page of Application

REFERENCES

[1] A webpage on my eclipse at http://www.myeclipseide.com/index.php?module=htmlpages&func=display&pid=214J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.
[2] WebPages at www.relevant-education.com
[3] Wikipedia page on Android Version History at http://en.wikipedia.org/wiki/Android_version_history
[4] Reto Meier, Professional Android Application Development, November 2008, Wrox Online Books, pp. 3 –4
[5] He, Keyi, Shaoyuan Wang, and Huiyan Zhu "Design and Implementation of SIP Protocol Stack Based on Android", 2012 Fourth International Conference on Computational and Information Sciences, 2012



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)