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LITERATURE REVIEW ABOUT ANDROID APPLICATION DEVELOPMENT

1 INTRODUCTION

1.0 Android [1] is a mobile operating system designed for increasing powerful mobile hardware. Windows mobile and Apple's iPhone provide simplified development environment for mobile applications. Android is built on proprietary operating systems that often prioritize applications those created by third parties and restrict communication among applications and native phone data.

1.1 Android Mobile Application Development is based on Java language codes. it allows developers to write codes in the java language. These codes can control devices via Google enabled java libraries. It provides the platform to develop mobile applications using the software stack provided in the Google Android SDK.

2 BODY

1.2 Android is a software stack which is for only mobile devices. it includes an operating system, key application. The Android SDK provides the tools. APIs necessary to begin developing applications on the android platform using the java programming language [2].Android based on Linux version 2.6. The system services such as security, memory management, process management are controlled by Linux.

1.3 Android applications are written in Java programming language. They are not executed using the standard java Virtual Machine(JVM).[3] Google has created a custom VM called Dalvik which is responsible for converting and executing java byte code. All custom java classes must be converted into a Dalvik compatible instruction set before being executed into one or more Dalvik Executable (.dex) files. it reuses duplicate information from multiple class files, effectively reducing the space requirement created to support the nature of mobile operating systems.

3 References

- [1] What is android? http://developer.android.com/guide/basics/what-isandroid.html

- [2] Android Architecture 2010[R/OL]. http://www.cnmsdn.com/html/201003/1268713218ID2058$_2$.html.

- [3] An Android Application Sandbox System for Suspicious Software Detection, by Thomas Blasing, Leonid Batyuk, Aubrey-Derrick Schmidt, Seyit Ahmet Camtepe, and Sahin Albayrak