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1. Android:-

Android is a mobile operating system that is based on a modified version of Linux. It is available to anyone who wants to adapt it to run on their own devices.

2. Features of Android:-

These are following

features of android:-

- i- Storage
- ii- Connectivity
- iii- Messaging
- iv- web browser
- v- Media Support.

3. Architecture of Android:-

Android architecture is a software stack of components to support mobile devices needs.

Following are main five sections

- i- Linux Kernel
- ii- Libraries

iii - Android runtime

iv - Application framework

v - Applications

i - Linux kernel

This is the kernel on which Android is based. This layer contains all the low-level device drivers for the various hardware components of an Android device.

ii - Libraries:-

These contain all the code that provides the main features of an Android OS. The webkit library provides functionalities for web browsing.

iii - Android runtime:-

At the same layer as the libraries, the android runtime provides a set of core libraries that enable developers to write Android apps using the Java programming language. The Android runtime also includes the Dalvik virtual machine, which enables every

contain a running

Android application to run in its own process, with its own instance of the Dalvik virtual machine.

iv- Application framework:

Exposes the various capabilities of the Android OS to application developers so that they can make use of them in their applications.

v- Applications:

At this top layer, you will find applications that ship with the Android device, as well as application that you download and install from the Android Market. Any applications that you are located at this layer.

4 Android Community:

With android in its fourth version, there is a large developer community all over the world.

There following communities of Android:

i- Stack overflow

ii- Google Android Training:

iii- Android Discuss

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i- Stack overflow.

Stack overflow is a collaboratively edited questions and answers site for developers. If you have a question about Android, chances are someone at stack overflow is probably already discussing the same question about X Android. and someone else had already provided the answer.

ii- Google Android Training.

Google has launched the Android Training site that contains a number of useful classes grouped by topics. At the time of writing, the classes mostly contain useful code snippets that are very useful to Android developers.

iii- Android Discuss.

Android Discuss is a discussion group hosted by Google using the Google Groups service. You will be able to discuss the various aspects of Android programming.

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5 Android SDK:

The first and most important piece of software you need to download is, of course, the Android SDK.

The Android SDK contains a debugger, libraries, an emulator, documentation, sample code and tutorials.

6 AVD:

AVD stand for Android Virtual Device. An AVD is an emulator instance that enables you to model an actual device. Each AVD consists of a hardware profile; a mapping to a system image; as well as emulated storage, such as a secure digital (SD) card.

7 Differ b/w android:versioncode & android:versionName attributes in the android:manifest.xml file.

The android:versioncode attributes is used to programmatically check whether an application can be upgraded. It should contain a running number. The

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android:versionName attribute is used mainly for displaying to the user. It is a string, such as "1.0.1".

8 What is the use of the strings.xml file?

Ans: The

The strings.xml file is used to store all string constants in your application. This enables you to easily localize your application by simply replacing the strings and then recompiling your application.

9: Android Market:

The Android Market hosts all the various Android application written by third-party developers.