Quadrant II – Transcript and Related Materials

Programme: Bachelor of Science (Third Year)
Subject: Computer Science
Course Code: CSC108
Course Title: Mobile Application Development
Unit: 01
Module Name: Android vs. Other mobile platforms, Open Handset Alliance (OHA), Features and limitations of Android

Name of the Presenter: Ms Bhakti Gawas

Notes:

Android v/s other mobile platforms:

1. **Android versus IOS**

- **Android is the most extensively used smartphone platform in the world and it is used by different device manufacturers like LG, Samsung, HTC, etc.**
- **IOS is used only on Apple devices like iPad, iTouch, Apple TV etc.**
- **Varieties of Android devices are available with differing sizes and hardware capabilities so the user can choose any one of them according to the requirement and budget.**
- **IOS is available only on Apple devices and they tend to be expensive.**
- **Android allows wireless payments with Near field communication, which is possible by Google wallet.**
- **IOS provides a Passbook app, which plays around debit/ card cards, but doesn't allow wireless mobile payments.**
- **Android SDK is available for all platforms: PC, Mac and Linux. It is an open and free platform.**
- **IOS SDK is available for Mac only. It is a closed platform.**

2. **Android versus Blackberry**

- **Android is an open source platform so it can be changed or hacked easily. This is why regular updates are released so that bugs can be fixed.**
- **Blackberry uses its on server and hence it is much secured. But if server fails, the problem is widespread and it may take days to fix the error.**
- **In case of customization of home screen, Android is a winner in market. It allows multiple home screens.**
- **Blackberry is very poor in customization.**
- **Android's market is huge as compared to Blackberry store.**

3. **Android versus Windows**
- **An Android device uses Android Operating System and it is an open source.**
- **Windows phone uses Windows operating system which is a mix of open and closed system.**
- **Android's apps store is very large.**
- **Windows phone can be used if security is the main concern and Android can be used if you really want your phone to act smart enough like a Smartphone should do.**
- **Android users are free to choose any app from market and developers don't target a particular set of end user's interest.**
- **Windows target apps with end user in mind.**

Open Handset Alliance (OHA):

- **OHA is an alliance formed for the open source mobile development technology.**
- **It is a consortium of 84 companies such as Google, Samsung, AKM, synaptic, KDDI, Garmin, Telecom, EBay, Intel etc.**
- **The OHA was formed in November-2007, OHA is a business alliance comprised of many of the largest and most successful mobile companies.**

- Aim of OHA was to bring all developers, manufacturer and cell phone related companies together to give best solution to all of them and consumer.
- OHA view for building a better phone for consumer.
- OHA members includes
    - Chip makers
    - Handset manufacturers
    - Software developers
    - Service providers

Features of Android System:

a. Millions of Apps.
    - Users have a vast choice to choose which apps they need.
b. Notifications are nicely displayed.
    - All the notifications of apps, messages, emails, low battery are displayed nicely.
c. Sharing of internet among devices.
    - With a mobile hotspot, you can share your device internet with other devices or with PC.
d. Supports Variety of mobile models
    - Android OS can run on a wide range of devices i.e. HTC, Samsung, OPPO, Motorola, Sony Ericson and many others.
e. Expandable memory
    - Mobile android devices come with expandable memory option.
f. Support large screens at an affordable price
    - Android gives large screen devices at good prices unlike other devices such as apple smart phones.
g. Run many apps at the same time
    - If there is a good specification phone then user can smoothly run multiple apps at the same time.
h. Android is Open source
    - Android is licensed under apache. Mobile companies change the code of android to make UI change a little bit.

Limitations of Android System:

a. **Apps run in the background**
   - Apps always run in the background and come to foreground as they wish due to that device battery vanishes quickly.

b. **Developers have a tough time**
   - Learning and developing android apps is hard because to make app adaptive to all screen sizes is challenging for the developers.
   - Developers have to write more code and are difficult to troubleshoot the app.

c. **Low specification mobiles run slow**
   - Android consumes lot of storage and some default apps also come with operating system so low specification devices run slow.

d. **Virus protection**
   - Users can download and install apps from other external websites and these apps may contain a virus and stole mobile data and information.

e. **Active internet connection**
   - Android requires an active Internet connection, so that the device is ready to go online according to our needs.

f. **Android is Open Source**
   - This nature makes it easy to customize any Android device; the same aspect also turns out to be a negative trait.
   - As hackers don't have to bang their heads for hours together to get through the system and play spoilsport.

Summary:

- ✓ Android is the most extensively used smartphone platform in mobile devices rather than other mobile platforms.
- ✓ Many users go for buying mobile of android platform since it is within budget then other mobile platforms.

- ✓ **OHA is an alliance formed for the open source mobile development technology.**
- ✓ **Android System supports many features which are mostly needed for the mobile phones.**
- ✓ **Developing android system is a tedious task; also it fails in virus protection.**