Android Rough Research

Topic A – Productivity & Application Software

* *Productivity software* is a tool such as Excel, PowerPoint, Word, Kid Pix, publisher, and many more. These programs enhance a teacher’s lesson plan and allow the teacher to take their students beyond textbooks and boring lectures.
* <https://www.applicationperformancemanagement.org/software/productivity-software/>
* Excel
* Powerpoint
* Word
* Kid Pix.
* [Google Apps for Business](https://www.google.com/apps/intl/en/business/index.html#utm_campaign=en&utm_source=en-ha-na-us-bk&utm_medium=ha&utm_term=google%20apps). Google’s office suite includes a selection of office productivity tools including enhanced-for-business versions of Gmail, Google Talk, Google Calendar, Google Docs, Google Sites, and Google Video. Several pricing options are available, based on the size of your business, and limited-time free trial is also available.
* [LibreOffice Productivity Suite](https://www.libreoffice.org/download). This free office productivity suite comes from the not-for-profit organization, The Document Foundation. Applications include Writer, Calc, Impress, Draw, Base, and Math. Because it’s free, support comes primarily from the community of users and the developers. The license for this suite is LGPL, meaning it can be customized as needed.
* [OpenOffice](https://www.openoffice.org/). Another free office productivity suite. The following are included in this suite: Writer, Calc, Impress, Draw, Base, and Math. Oracle is the primary contributor of code to OpenOffice, but other major companies also contribute. For technical support, they offer a forum and a FAQ site as well as a user guide.
* [Microsoft Office](https://office.microsoft.com/en-us/). The Microsoft Office Suite has a variety of configurations from home use to student use to use by various size businesses. Depending on the configuration, the applications included in the suite can change, but it usually includes at least Word, Excel, PowerPoint, Outlook, and OneNote. The suite is not free (although some versions may have a free trial), but there are a huge number of free templates available on the Microsoft site.
* [WordPerfect Office X5](http://apps.corel.com/lp/wpo/). Another office productivity suite that offers multiple configurations based on the customer need. The home and student version includes software for word processing, spreadsheets, slideshows and presentations, and a digital notebook. Free trials are available although the productivity suite is not free. Some templates are also available. Support plans are available and there is also knowledgebase of frequently asked questions.
* [Zoho](https://www.zoho.com/). Zoho offers a large number of productivity software tools, but as far as I could tell they are not packaged together in a suite. As of the time of publication, Zoho products were free for personal use, although the site stated that business and corporate users may be charged. Some Zoho tools that may be of particular interest include: Writer, Sheet, Show, and Calendar. Support is available.
* [Quickoffice](http://www.quickoffice.com/) & [OfficeSuite Pro5](https://market.android.com/details?id=com.mobisystems.editor.office_with_reg&hl=en). While these are technically not office suites themselves, these apps give the capability to access your Microsoft Office files from your mobile device. For the freelancer on the go this means mobility. OfficeSuite Pro5 is specifically for the Android Market. Quickoffice can work with a variety of mobile devices.
* [PlusOffice Free 3.0](http://www.downloadatlas.com/docx/plusoffice-free-by-openoffice-software-sp-z-o-o.html). A freeware package is based on OpenOffice. Use this on Windows 7/Vista (I did not see a Mac version). The suite includes a text editor, spreadsheet, presentation package, and more. Compare with commercial packages.
* [IBM (r) Lotus (r) SmartSuite (r)](https://www-01.ibm.com/software/lotus/products/smartsuite/). This suite will cost money, but the product also has the support of IBM. It includes Word Pro (r), Freelance Graphics (r), and Approach (r). Additional software options are available for an added cost.
* [ThinkFree](http://product.thinkfree.com/office). This office productivity prides itself on being compatible with MS Office. Use it for word processing, creating spreadsheets, and presentations. There are many versions of this suite available, including one for the Windows, the Mac, Linux, and even Android operating systems. Even though this suite costs money, you can download a trial version.
* [KOffice](http://www.koffice.org/). This is another free office productivity suite alternative. It includes KWord (a word processor), KCells (a spreadsheet) and Showcase (presentation software). Because it’s free, it largely depends on volunteers and users to maintain and update it. There is a Userbase and forum.
* [NEOOffice](https://www.neooffice.org/neojava/en/index.php). This is an office suite specifically for MAC OS X. They’ve even included a mobile version that can be accessed remotely. It is distributed under the GNU General Public License (GPL). It is funded entirely by user donations.
* [Softmaker](http://www.softmaker.com/english/of_en.htm). This office productivity suite includes TextMaker (word processing), PlanMaker (spreadsheet), and Presentations. There are multiple versions available including a mobile version. This package does cost money
* https://www.applicationperformancemanagement.org/software/productivity-software/
* Adobe Acrobat Reader ([Android](https://play.google.com/store/apps/details?id=com.adobe.reader&hl=ru) & [IOS](https://itunes.apple.com/us/app/adobe-acrobat-reader-annotate/id469337564?mt=8))
* Voxer Walkie Talkie Messenger ([Android](https://play.google.com/store/apps/details?id=com.rebelvox.voxer&hl=ru) & [IOS](https://itunes.apple.com/us/app/voxer-walkie-talkie-messenger/id377304531?mt=8))
* Indeed Job Search ([Android](https://play.google.com/store/apps/details?id=com.globalexperts.jobsearch&hl=ru) & [IOS](https://itunes.apple.com/us/app/indeed-job-search/id309735670?mt=8))
* Facebook Pages Manager ([Android](https://play.google.com/store/apps/details?id=com.facebook.pages.app&hl=ru) & [IOS](https://itunes.apple.com/us/app/facebook-pages-manager/id514643583?mt=8))
* Dragon Dictation
* Square Register – Point of Sale ([Android](https://play.google.com/store/apps/details?id=com.squareup&hl=ru) & [IOS](https://itunes.apple.com/us/app/square-register-point-sale/id335393788?mt=8))
* <https://thinkmobiles.com/blog/popular-types-of-apps/>

Topic B – Entertainment & Media Software

* Netflix (Android & IOS)
* Dubsmash (Android & IOS)
* Talking Tom Cat (Android & IOS)
* Amazon Prime Video (Android & IOS)
* NBC – Watch Now and Stream Full TV Episodes (Android & IOS)

<https://thinkmobiles.com/blog/popular-types-of-apps/>

Topic C – Programming Tools & Environment

* **Android** Studio. ...
* ADB (**Android** Debug Bridge) ...
* AVD Manager. ...
* Eclipse. ...
* Fabric. ...
* FlowUp. ...
* GameMaker: Studio. ...
* Genymotion.

<https://www.altexsoft.com/blog/engineering/top-20-tools-for-android-development/>

Topic D – System Tools

Topic E – Software Security & Updates

Security has always been a major focus for Android. We designed the system to protect users with multiple layers of protection in the platform and built-in security services.

But we’re never satisfied.

To make Android even safer, we share source code for security fixes every month with our partners and users. We also have an established monthly update cycle for Nexus and Pixel devices and partners.

Topic F – File System & User Accounts

* exFAT - The extended File Allocation Table is a Microsoft proprietary file system for flash memory. Due to the licensing requirements, it is not part of the standard Linux kernel. However, some manufactures provide Android support for the file system.
* F2FS - Samsung introduced The Flash-Friendly File System as an open source Linux file system in 2012.
* JFFS2 - The Journal Flash File System version 2 is the default flash file system for the AOSP (Android Open Source Project) kernels, since Ice Cream Sandwich. JFFS2 is a replacement to the original JFFS.
* YAFFS2 - Yet Another Flash File System version 2 was the default AOSP flash file system for kernel version 2.6.32. YAFFS2 is not supported in the newer kernel versions, and does not appear in the source tree for the latest kernel versions from kernel.org. However, individual mobile device vendors may continue to support YAFFS2.

<https://www.all-things-android.com/content/understanding-android-file-hierarchy>

Topic G – Special Features of your OS

* 1) **Near Field Communication** (**NFC**) ...
* 2) Alternate **Keyboards**. ...
* 3) Infrared Transmission. ...
* 4) No-**Touch** Control. ...
* 5) **Automation**. ...
* 6) **Wireless** App Downloads. ...
* 7) **Storage** and **Battery** Swap. ...
* 8) Custom Home Screens.

Topic H – Limitations of your OS

**1. Quality and Defects of Apps in Play Store: -** The quality of the available apps on the Play Store is much worse compared to those on Android App Store. It is only because Android’s policy field allows publishing any resolution.

There are also many apps on the Play Store that are not reconcilable with different levels or ranges of Android phones. There are several other apps on the Play Store that are free for download, with brimful of advertisements and marketing materials that tend make the user experience obtrusive and jarring.

2. **Device Issues: Storage Limit; Drains Battery; Overheating: -** Storage limit is one of the main issues, as majority of the android devices have minimal internal storage capacity. Thus downloading large files, games, videos, storing apps become an issue. Surely you can transfer big files to SD card but some games or apps don’t allow transferring on SD card or sometimes malfunctioning occurs while operating from memory card. You need to root your device for that.

Other limitation is since Android has many ongoing processes running in the background the high usage of RAM get stressed resulting in the poor Battery performance.

With Android phones excess heating is a common issue, particularly when playing games with heavy graphics or when one is drowned in extreme multitasking.

**3. System Drawbacks & Unlimited Applications:** - Android is known as the “world of applications’’, which consequently means you need to have uninterrupted internet service that’s likely not possible for all the users. Though data connection isn’t any big issues anymore, yet you require a good supply of Internet for the apps to function efficiently.

Android platform is open for all, thus the availability of its source code is open to everyone, which invites the attention of hackers and their ill deeds. Eventually this infects the apps before even they get launched publically. Most of the apps in the Play Store are stuffed with malware.

Android users can’t directly control the device for any issue as it doesn’t give it users’ access to Administrators rights.

https://www.quora.com/What-are-the-top-3-limitations-of-of-Android-app-development