

Exploring Android

Where It Began

I have a number of outdated computers which I am thinking I might replace as I've recently received a small legacy. The question is – with what? The options I'm considering include one or more of the following:

- An up-to-date laptop (running Linux, of course);
- A tablet (running Linux or Android);
- A smartphone (running Android).

These notes are intended to be a summary of my initial explorations of Android.

Possible Problems

- I am short-sighted. My current glasses cover long to medium distances, with a separate pair (or none) for close work;
- I am left-handed;
- I am increasingly clumsy.

First Attempt

I downloaded an Android-for-PC image and tried to get it working on one of my machines. The oldest ones rejected it, but I did eventually manage to get it working, after a fashion, in VirtualBox. However, trying to imitate a touchscreen with a mouse really didn't work for me!

Second Attempt

My son has lent me his discarded smartphone – a two+ years old HTC Wildfire S running a late version of 'Gingerbread' (2.3.5 – the current version of Android is 4.3). It has a 3.2" touchscreen and a 5MP camera and is quite a dinky device. All he told me about it was how to unlock the screen and 'The touch is getting a bit hit-or-miss; you sometimes need several tries'. Actually, the main problem is to choose the correct touch from the range available: brief, longer, swipe ... and to put it precisely on the required spot.

First observation: the battery only lasts for a day or less compared to the week I get with my dumbphone. So – I had to invest in a USB cable with the correct sized plug (less than £3 on eBay and vital for what followed).

There is, fortunately, a huge 'aftermarket' full of accessories and advice. Google is your friend – as usual.

I found several websites offering advice on how to extend the life of your smartphone battery between charges. Basically, you switch off the features that make it a smartphone – WiFi, GPS ... !

Second Observation: The Power button falls conveniently to a finger when I hold the phone in my right hand so that I can touch-type with my left – consequence: lots of false switches into sleep mode (which means I lost whatever I was typing.) The volume rocker is also in the 'wrong' place for a leftie.

One of the first things I should have done is to track down the User Guide. Sure enough, it's out there on the internet – as a free PDF. Meanwhile I picked up various random snippets from web pages while looking for something else.

Third Observation: Things the Android device appears to lack, compared to a PC:

- Can't 'kill' an app – Android doesn't multi-task, it just switches away from the app to another one, suspending (presumably) the one previously in focus. Can cause a problem if the smartphone is short of RAM (as the HTC Wildfire S is);
- There is a 'back' button – but not a 'forward' one;
- There are multiple screens instead of windows – easy to lose one's way in the first day or three;
- When typing, it is possible to get the cursor in the wrong place. I couldn't find a way to move it to the right, to keep typing – other than starting again. Very frustrating!
- Typing is a **pain!** It is possible to rotate the screen to work in 'landscape' mode – but not all apps or aspects of the basic Android support 'landscape' mode!

Fourth Observation: I managed to get the smartphone linked into my home WiFi setup. Because of the old equipment in use it's 802.11g – but that seems to work quite well.

Fifth Observation: The PAYG SIM card from my dumbphone worked! I was told (by a man in Phones4U) that I could quickly run out of credit as the supplier could charge £1 for every attempt by the smartphone to do an automatic update. This isn't the whole story as I have selected a mode in which the phone only asks for updates when it has a WiFi connection. (There is also an 'Airplane' mode to switch off all transmissions while you are flying.)

Sixth Observation: HTC provides a means for transferring files to/from a PC and 'synchronising' – but it expects to have a Windows PC at the other end of the connection! I have had my Linux Mint PC viewing the SD card in the smartphone (another £10 I had to fork out to make the phone do useful stuff), but the sequence of firing up and connecting the USB cable is critical – not to mention the USB mode in use on the smartphone.

Seventh Observation: Android pushes Google services (no surprise there). I had to sign up to GooglePlay in order to download the apps I needed. HTC also has an app store – but there seems to be no reason to use it. I was also offered the means to synchronise my Google mail and other Google stuff. Interesting job for the future – how to synchronise so that I still have my PC as my 'master device'. I sense a switch from POP to IMAP on the horizon.

Progress Towards a Goal

As the object of the exercise was to have an Android smartphone to demonstrate to the group I looked for a way to project the tiny screen onto Andy's wall. An app, AirDroid, seemed to be promising but it stubbornly refused to work. Further investigation revealed that AirDroid requires the phone to be rooted which, in turn, means it has to be unlocked. The unlock instructions are on the HTC website (surrounded by dire warnings!) – but they assume that your PC is running Windows! I did manage to unlock the phone using my Linux Mint PC – but it wasn't easy. Having got that far, rooting was relatively easy. Unfortunately, while I can control my smartphone from my PC, using AirDroid, the screen-capture bit still refuses to work.

What is 'Rooting' and Why Do It?

Rooting is a bit like enabling 'sudo' mode in Linux. This is both a 'good thing' and a 'bad thing'. It enables you to:

- Access (some) system files and give apps permission to do so. As soon as I rooted my phone I installed an app that controls which apps get root access. (Later versions of Android have this capability built-in, I think);
- Install unapproved apps (with the increased possibility that they carry malware);
- Remove the OEM bloat;
- Install different ROM images such as CyanogenMod to give your smartphone different capabilities.

Unlocking, on the other hand, enables you to switch to a different network. It is also a necessary precursor to rooting.

Some Thoughts About Hardware

Hardware specifications move forward very quickly. The single-core processor, 5M-pixel camera and 512MB of RAM mark the Wildfire S out as several generations old.

What constitutes the 'best' smartphone changes rapidly.

Some smartphones e.g. the Google 'Nexus' series are 'sealed' i.e. there is no way to change the battery or add an SD card to give more storage space.

Most smartphones have versions of Android installed which include extensions added by the hardware manufacturer in order to differentiate their product from the competition. Some of these are useful; more and more are useless unnecessary bloat. The Google Nexus series are 'straight' Android; as an added attraction, they are the first to get updates to the latest Android version (OEMs and networks can hold back upgrades for long periods).

Buying a smartphone on a monthly 'plan' is a lot more expensive than buying the hardware SIM-free and then buying a SIM-only package that meets your needs. Telephone numbers are now transferable, so that's not a problem.

If I find the HTC useful, I currently plan to buy the next generation Nexus smartphone which is widely rumoured to be arriving in October. The latest Samsung Galaxy is an awesome piece of hardware, but it's expensive and comes with a lot of software bloat.