How to develop Android Apps under Linux (Ubuntu)

Install Ubuntu Linux alongside with Windows

1. First **install Windows**. Let an empty partition of minumum 10 GB at the end of all Windows partitions or resize the last Windows partition with Windows Disk Manager to get an non-partitioned space the end of all Windows partitions.
2. For **Windows XP**: Download from the Ubuntu download section the latest 32-bit or 64-bit version of the .iso image. To create an Ubuntu boot CD: Install on Windows PC InfraRecorder from Internet Start it and select **Write Image**. **Burn** the image to an empty CD.
3. **For Win7**: Right-click on .iso image and select **Burn to CD/DVD.**
4. Boot with CD (change the boot order in BIOS if necessary). Press **Enter** to get the Language Menu and **select your language** (English).
5. Select **Install Ubuntu.**
6. Select **Install Ubunty alongside with Windows** (should install on free disk space) (If the system hangs during boot-up, see appendix.)
7. Select Menu **Applications | Ubuntu Software Center**. Select Menu **Edit | Software Sources**. Enter password. Select Tab **Other Software** and **check** the two upper check boxes. Press **Close**.
8. In Ubuntu Software Center Type in Search **"startupmanager"**. Download and install.
9. Select Menu **System | Administration | Startup-Manager**. In Dialog Field **"Default operation system"** select what you want, e.g. Windows.
10. For 64-bit systems: Ubuntu Software Center: Search **Aptitude** and install this packet manager Start Aptitude (Menu System | Administration). Search ia32. Select **ia32-libs** and press Install ia32-libs version xxx. (Alternative: Execute in shell **sudo apt-get install ia32-libs).**

Configure Ubuntu Linux for http://www.java-online.ch

1. Ubuntu Software Center: Search **jre plugin** and install **Java™ Plugin.** Accept License Terms.
2. If you need to setup this plugin (e.g to show the Java console, etc), open Menu System | Preferences | **Sun Java 6 Plugin Control Panel.**
3. Start **Firefox**. Menu Edit | Preferences. Tab General. Edit **Home Page**. Select **Downloads Close it when all download are finished**. Menu View | Toolbars. Select **Navigation Toolbar**.
4. Test Applets: www.java-online.ch Turtlegrafik. Online-Editor starten. Compilieren. Ausführen. Confirm all security warnings.
5. Install Android Emulator: Go to www.java-online.ch/android. Benutzerinformationen | **Emulator installieren**. Click Button **Emulator installieren**. Select Online-Editor starten. Compilieren. **Emulator starten**. Android emulator should start after a while. Click **MyAndroid ausführen**. The app should start on emulator.
6. Emulator files are stored home/<user>/.jdroidemul. (With some File Explorers you need to click Ctrl-H to show folders starting with a period.) There you find an executable emulator startup bash script **startemul**. You may create a link to it and put it where you want (e.g. on the desktop). (When you click the script, normally Ubuntu asks how to open it. To skip this prompt, start nautilus (under Menu **Places** click any option). **Goto Menu Edit | Preferences | Behavior** and select under **Executable text files:** Run executable text files when they are opened.)
7. Click in the lower part of the Online-Editor **Debug-Console** starten and a debug console is shown that contains some important runtime messages. (The emulator or a real device has to be attached.) You may write to the console using the the static **L.i(String msg)**. Try it by including L.i("Hello Android") in the main() method.
8. If you only use the Online-Editor as development tool, no further installation in necessary.

Install the Android SDK

1. Ubuntu Software Center: Search **android.**
2. Consult the Internet to learn how to finish the installation.
3. Create a Android Virtual Device (emulator) and start it.

Install the Eclipse IDE

1. Ubuntu Software Center: Search **eclipse** and install **Eclipse.**
2. Start Eclipse and install the ADT-plugin. (Consult the Internet to learn how to do it.)

Install the Java Development Environments (JDK)

1. Ubuntu Software Center: Search **jdk** and install **Sun Java™ Delvelopment Kit.**
2. Test: Ctrl-Alt T to open a command shell (terminal). If you type **javac** a usage message must be displayed.

Install the Netbeans IDE

1. Ubuntu Software Center: Search **netbeans** and install **NetBeans IDE.**
2. Start Netbeans and install the Android plugin. (Consult the Internet to learn how to do it.)

Install USB Device Drivers

See: http://www.idroidproject.org/wiki/ADB

1. Connect your Android device
2. Execute adb command: go to folder and type ./adb devices. You should get something like
3. List of devices attached
4. S5830b1eaaa53 device (number may change)

Appendix: How to fix Ubuntu Version 10.04 blank screen at startup

This seems to be happening with nVidia graphic cards to fix this problem try to use the following solution i hope this would help

Solution1

I have a HP Pavilion SLimline s7727c

with lspci giving me

VGA compatible controller: nVidia Corporation C51 [GeForce 6150 LE] (rev a2)

I was getting a blank screen (out of sync) on booting from the live cd.

I worked around the problem as follows:

* At install screen press F6 and select **nomodeset** and install Ubuntu as usual.
* On first boot after install, press **e** on getting the GRUB bootloader.
* Using arrow keys navigate to and **delete quiet and splash and type the word nomodeset** in their place
* Press **Ctrl and X** to boot
* You should now be able to login to your Ubuntu as usual

For those of you who do not know what to do next, in the taskbar click on System->Administration->Hardware drivers, and select and activate the nvidia current driver if you have an nvidia card like I do. The driver will be downloaded and activated automatically, and you will be prompted for a reboot.

Solution 2

Yes, I think you may be right about it being a graphics card problem. I think you may have the same problem that I did on my beat-up old Toshiba Satellite A10.

So, here is what should work:

At the very first screen, the one with just the rectangle (it's meant to be a keyboard) and a human figure, press any key - spacebar will do.

Then choose your language.

Then make sure you have "Try Ubuntu without any changes" selected, and then press F6

Add this to the end of the command line:

i915.modeset=0 xforcevesa

Then press enter and it should boot successfully.

Solution 3

1. Boot from the Ubuntu 9.10 CD
2. Mount the internal HD and look for /etc/X11/xorg.conf - its missing!
3. Copy a new "known good" xorg.conf file to the HD (I had to use sudo cp … otherwise I got permission problems)
4. System boots fine.