**daily tasks report**

**Model**

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| Date |  |
| Done before |  |
| To do |  |
| Done |  |
| Report: | |

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| Date | 10/03 |
| Done before |  |
| To do |  |
| Done |  |
| Report:  Try debug with Android NDK gdb Eclipse | |

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| Date | 15/03/16 |
| Done before | * Report introduction and context * Install tools * Run Magpi and current SD application on Android * Debug Android app (Java code) * Download Virtual Box and install Ubuntu. |
| To do | * Debug native C code with gcc or ndk-gdb C/C++ * Understand overall SD code with debugging and walking through the Magpi and SD app |
| Done |  |
| Report: | |

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| Date | 17/03 |
| To do | * Connect to a linux virtualbox VM via SSH through Mobaxterm and work on eclipse project through SSH. |
| Done | * Connect to a linux virtualbox VM via SSH through Mobaxterm and work on eclipse project through SSH. |
| Report:   * SSH into a VirtualBox Linux guest from your host to avoid working with VirtualBox display (really costly in RAM and graphic ressources): * Solution 1:  1. Stop your VirtualBox machine 2. Go to the the settings of VirtualBox and click on the Network tab 3. Click on Host-Only Networks tab and click on the + logo on the left to create a new Host-Only network 4. Go to the settings of your VM on network tab 5. On the “Adapter 2” tab, click on “enable network adapter” and select “host-only adapter” in the “attached to” field. You should see on the “name” field something like “VirtualBox Host-Only Ethernet Adapter #2”. 6. Click on ok and start your VM 7. Find your ip information (…) 8. Connect via SSH to your VM on a putty-like terminal (like MobaXTerm) 9. (Did’nt work for me).  * Solution 2 (nice) :   Source : <http://stackoverflow.com/questions/5906441/how-to-ssh-to-a-virtualbox-guest-externally-through-a-host>  Login to a guest Linux VirtualBox VM via port forwarding   1. By default, you should have one interface already which is using [NAT](http://en.wikipedia.org/wiki/Network_address_translation). 2. Then go to the Network settings and click the Port Forwarding button. Add a new Rule:   Host port 3022, guest port 22, name ssh, other left blank.  or from command line  VBoxManage modifyvm myserver --natpf1 "ssh,tcp,,3022,,22"  where 'myserver' is the name of the created VM. Check the added rules:  VBoxManage showvminfo myserver | grep 'Rule'   1. That's all! Please be sure you don't forget to install an [SSH](http://en.wikipedia.org/wiki/Secure_Shell) server:   sudo apt-get install openssh-server   1. To SSH into the guest VM, write:   ssh -p 3022 [user@127.0.0.1](mailto:user@127.0.0.1)  Where user is your username within the VM.   1. Open an SSH client terminal (Like MobaXTerm or Putty) and connect to your VM remotely. MobaXTerm uses SFTP as well so you can transfer files directly from your local machine to the VM. | |
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| Date | 18/03 |
| Done before | * Connect to a linux virtualbox VM via SSH through Mobaxterm and work on eclipse project through SSH. |
| To do | * Compile the project remotely via Eclipse and SSH. * Debug the project with eclipse and ndk-gdb or gdb or another compiler for native code. * Identify the main working process and algorithm for the SD app from the reception of a form, its parsing to stripped data, to compression to binary * Change something into the new stripped data format and see what happens. * Make the app work with a new stripped data format * Translate XML with a new tag (subform) to the right stripped data format * Make the whole process work with a subform: XML form with sub-forms + form spec 🡪 Stripped data 🡪 Binary |
| Done | * Detect USB flash drive and android phone in VirtualBox linux VM |
| Report:  🡺How to detect a USB flash drive from terminal in Ubuntu (for file transfer and android phone detection with ADB).  Nice solution:   1. <http://www.dedoimedo.com/computers/virtualbox-usb.html> 2. <http://askubuntu.com/questions/37767/how-to-access-a-usb-flash-drive-from-the-terminal-how-can-i-mount-a-flash-driv> 3. Configure USB support in VM settings   Go to File>Preferences in VirtualBox and click on USB  Add USB device filters for your android phone and eventually other USB flash drives  🡪 Shut down and restart your VM   1. On restart, find what the drive is called   You'll need to know what the drive is called to mount it. To do that fire off:  sudo fdisk -l  You're looking for a partition that should look something like: /dev/sdb1. Remember what it's called.   1. Create a mount point   Create a new directory in /media so you can mount the drive onto the filesystem:  sudo mkdir /media/usb   1. Mount!   sudo mount /dev/sdb1 /media/usb  *When you're done, just fire off: sudo umount /media/usb*  Now we’ll try to install everything we need to make eclipse, ADT, ...  🡪 Issue: The VM tells it has not enough space on disk so can’t install anything.   * Solution: Reinstall a new VM with not-fixed size and enough size (20.00 GB). | |

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| Date | 21/03 |
| Done before |  |
| To do | 18/03 tasks   * Install new Ubuntu VM with enough size (20.00 GB) and not-fixed size. |
| Done | * Install new Ubuntu VM with enough size (20.00 GB) and not-fixed size. * Install ssh server and make ssh link between mobaXterm and VM |
| Report:   * Install new Ubuntu VM   To do: install ssh server on vm (sudo apt-get install openssh-server) | |

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| Date | 24/03 |
| Done before |  |
| To do | * See 18/03 |
| Done | * Set all required jdk, android sdk, ndk, project on new VM * Run Eclipse with X11 display forwarding via SSH with root user and install all android sdk manager required packages via eclipse |
| Report:   * Run Eclipse with X11 display forwarding via SSH with root user   If when you try to run eclipse with root user (to access all privileges), the following error occurs:  MobaXterm X11 proxy: Unsupported authorisation protocol  Then the probable issue is that the authentication of X sessions is not set correctly.  Be sure that xauth is installed:  user@machine:~$ sudo apt-get install xauth  Then copy the .Xauthority file from your user directory to root directory  user@machine:~$ sudo cp /home/user/.Xauthority /root   * Install all required softwares on eclipse easily   If some problems occur during the downloading/installation of an eclipse software:   * It is better to install all software in eclipse in the beginning directly via virtualbox vm display. * Check that the internet connection works via web browser in the vm display? | |

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| Date | 04/04 |
| Done before | See 18/03 |
| To do |  |
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| Report: | |