# CHAPTER TWO FIELD ATTACHMENT

## 2.1 IT SUPPORT

### 2.1.1 Servicing a computer

I was introduced to the major role of an IT support which is servicing a computer. I got to learn the major causes of slowness in a computer and the ways of cleaning my computer either in an office or when a customer brings a computer which needs to be serviced.

I serviced a computer set, which included the system unit, keyboard and the monitor, before servicing I was required to turn off the computer and after this I unplugged all cables on the system unit and on the monitor. Different parts of the computer set were cleaned using different apparatus and in so doing I used compressed air from the blower, a soft blush, a wiper and a universal foam cleaning agent to clean the key board, a blower to clean inside the system unit and a wiper with universal foam cleaning agent to clean the monitor screen, I looked at the types of hard disks which were SATA and IDE, where SATA is the new technology and IDE is the old technology. During the process of cleaning I got to know the different parts of the system unit and their functionalities:

### 2.1.2 TROUBLESHOOTING (computer Optimization)

I learnt the different trouble shooting techniques which are top down where one starts from the application layer going down to physical layer, bottom up this is where you start from physical layer to application layer, trial and error you use your knowledge to trial to come up with a solution, divide and conquer which typically begins from the middle layers and works up and down and substitution which is done by substituting the hardware components.

I learnt the major things which cause slowness they are:

* wrong computer specification
* computer virus
* size of the virtual memory
* compatibility issues
* out dated anti virus
* many start up programs
* Maintenance life span.

Troubleshooting methods that I undertook to overcome the above problems are as follows

Checked the computer properties by right clicking on my computer then selected properties, this showed me that the computer was running on windows XP SP2 Professional, had RAM capacity of 512MB and Pentium (4) at a speed of 2.40GHz of CPU.

On checking on the properties I found that the they were ok and would not make the computer to be a slow as it was so I decided to delete some files from the recycle bin to create space and I went on to delete temporary files to create more space on the computer, I went on and recovered temporary files by clicking on start →r un type %temp% then pressed ok. After this I decided to defragment the hard disk so as to organize the files in them to avoid lose of spaces in the hard disk. In order for me to carryout disk fragmentation I right clicked on my computer and clicked on manage then on disk defragment. I could only view one partition i.e. C, I then clicked on analyzes button then defragment and after the above procedures I could now see the fragmented, contiguous and unmovable files.

### 2.1.3 Computer repair

After this I found out that some files on the operating system were already corrupted so I decided to repair my operating system by put in a CD with my operating system (XP) and then restarted the computer and commanded it to boot from CD after copying the files I had to wait until when it would show the hard disk with the operating system and press R for it to start the repair.

### 2.1.4 Data back up

I did data backup this is to be in a position to restore my data may it be software, drivers or any other important information. I backed up user files, and I was in position to do this by following the steps listed below: I went to start → all programs → accessories → system tools → backup, pressed next, next, every ones document and files was selected and then proceeded with the procedure with an aim of keeping the original copy that might be needed in case of data loss on an external disk. I took note of the programs that were currently installed on the computer and also backed up drivers. The main reason why I choose to back up is because the machine was still very slow so the only remaining process to optimize the performance of the computer was to format which I did as follows:-

### 2.1.5 Formatting a computer

* I inserted Windows XP CD in the drive.
* Then restarted my computer.
* Then I prompted it to boot from CD
* I had to wait for it to copy files and when it reached where I could see the disk partitions I choose the disk with the OS and since it was too big I decided to partition it so that I could now create a partion for my back up so I deleted the partition and created it again now specifying the size I want after doing this I prompted it to continue with the installation process and choose the quick NTFS format since the previous version of Operating system was still XP professional.
* I had now to wait for the installation process to proceed when it asked for the key I inserted the right key it had to restart itself for several times prompting me to boot from CD but this time I did not press any key I waited until when I could now see icons on my desktop. I was also in position to restore user data, re installed all user programs and drivers like Microsoft office 2007, Mozilla Firefox, antivirus, adobe reader and USB disk security.

### 2.1.6 Troubleshooting for powering a machine

I reported on my intern place on reaching their I tried to power on the computer but it demanded for a power on password I had first to shut it down and unplugged all the cables and then opened the system unit and removed the CMOS battery so that it could loose all it memory . After removing it I closed the system unit and powered it on it powered on well without asking for the power on password but on reaching the administrator password I didn’t have it so I had to use a password cracker to remove it. One of my fellow intern member came for assistance since her computer had failed to boot I checked all the possible connections to the computer and the system unit and I solved the problem accordingly by connecting the power cable that was disconnected and fixing the RAM chip firmly back to its’ slot, connecting the serial data bus to its port etc.