



MINISTRY OF SPORTS CULTURE AND THE ARTS

PRESIDENTIAL DIGITAL TALENT PROGRAMME

PROGRESS REPORT

8TH November, 2017

SUPERVISOR

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DUTIES

i) Computer care, maintenance, repair and network use

During our placement in the ministry we practiced most of computer care, maintenance and repair, where most of the computers required repair, upgrading and maintenance. This is because these are the computers mostly used by the staff for their daily routine, and research. Most of the staff come with their own removable storage

devices with information from various machines that can enhance the damage of some data in the machines for instance they may spread virus in machines.

We worked hand in hand with the ICT officers and during this time we learnt how to detect and repair common hardware and software problems.

ii) Troubleshooting

Various tests were carried out on computers, printers and their components which were suspected to be faulty. Basically, faulty components were removed and tested on a different computer upon which it was determined if the device was faulty or not. After troubleshooting, records of all faulty components were kept in preparation for repair or replacement. Some of the components tested included the mouse, keyboards, power supply units and hard disk drives.

iii) Computer repair and upgrade

Computer problems included scanning and disabling of viruses, updating antivirus software, repair or replacement of faulty components and also upgrading of computers to improve their performance. Faulty components such as processor fans and Power Supply Unit (PSU) fans were repaired. I learnt and practiced computer assembling and disassembling procedures.

iv) Software and operating system installation

We took part in software and operating system installation. As a legal requirement, they used genuine software and operating systems e.g. Windows 2010, Windows 2013, Windows Xp (service pack 2 and 3), Windows 7 ultimate and Windows professional which are mainly used by officers for their daily operations and for office applications. This reduces the risk of infection by viruses and also corruption by pirated software. We were able to take part in the installation of Windows Operating systems and Anti-virus software including: Kaspersky.

v) Formatting new hard disks

Before installing Operating systems, the hard disk was scanned for viruses, formatted and partitioned using a file system required by the operating system to be installed. During their replacement of software's we learnt:

- The procedure of partitioning and formatting a hard disk.
- How to install different operating systems on one hard disk i.e. dual boot.
- Repairing of operating system when fails to boot properly using recovery software.

vi) General computer maintenance and cleaning practices

General care of computers is important to avoid the risk of breakdown. Computers have Kaspersky anti-virus software program that is upgraded frequently. The computers are also scanned for viruses frequently to make sure that no virus attack is experienced that may lead to damage of vast data.

During computer care and maintenance practices, we learnt and applied various safety measures in assembly and disassembly of the devices in the system unit while testing, repairing or replacing them. Such safety measures included the fact that: -

- ☐ Handling each device or component with a lot of care because some of the components are Delicate.
- ☐ The computer has to be switched off before disassembly.
- ☐ All devices have to be carefully and properly unscrewed.
- ☐ Disassembled devices are placed on a clean table.
- ☐ Power and data cables are unplugged slowly to avoid breaking any pins.
- ☐ After assembling devices, all connections are counter checked before powering the computer.

vii) Network setup and administration

Ministry of Sports Culture and the Arts has a server-based network connected using fiber optic cable that enables faster transmission of data. It uses star network topology.

This is because;

- ☐ It's easy to expand enabling to add more machines to the network.
- ☐ It enhances easy sharing of data, printer and the scanners.

With the help of the Technical assistant, we learnt many networking procedures and devices. We learnt how the network operates and we observed how network resources are shared and accessed.

viii) Termination of Ethernet cables and Fiber optic cables

Faulty cables were replaced with newly terminated Ethernet cables. During this routine we were able to enhance our skills on termination of Ethernet cables. We also got a chance to be involved in termination of Fiber Optic Cables, we learnt on identifying faulty connectors and how to work efficiently with this cables since they are very sensitive and fragile.

Report compiled by: Jethro Kiplangat Kigen.