## **Name: Kwesi Koranteng**

## **Roll: 10022300119**

Internship Journal at THE IT DEPARTMENT OF Academic City University College

Interviewees:

- Mr. Arunava Sarkar (Head of IT)

- Mr. Mouaz Ibrahim (Networking and Hardware Head)

- Mr. Moris (IT Head)

- Mr. Kwesi (Hardware and Networking Specialist)

Week 1: Understanding IT Infrastructure

Preparation for Visit:

For our initial visit, the team scheduled a meeting to inquire about the IT infrastructure at Academic City. We arranged to convene every Tuesday at 3 PM for training sessions with Mr. Kwesi.

During our first meeting with the IT department, we expressed our desire to learn from their operations. Despite their busy schedule, they agreed to guide us, setting our learning sessions for Tuesdays at 3 PM.

Week 2: Understanding IT Divisions

We discovered that the IT department is segmented into various units. One team handles programming tasks, while another is responsible for hardware, including computers, security cameras, routers, servers, and access doors.

Week 3: Discussing Access Doors and Internet Connectivity

In our discussions about access doors, we learned that they are battery-operated, requiring periodic replacements. The school's internet service, provided by MainOne, runs on a fiber optic cable extending from the server room in the library to access points no further than 250 meters to avoid signal degradation. The network also uses D-Link switches, chosen for their efficient cooling systems, and PoE switches to power the campus cameras. The school prioritizes internet speed over bandwidth, maintaining a 150Mbps connection to ensure smooth downloading of large files.

Week 4: Firewall and Lab Upgrades

We explored the firewall systems and learned that a FortiGate firewall is configured to block certain websites from the server room. Recent upgrades in the computer labs include the installation of all-in-one systems with SSDs, replacing older models that struggled with demanding software like SolidWorks and MATLAB.

Week 5: Practical Learning and Software Adaptation

The IT staff emphasized the importance of self-directed learning to complement practical coursework. They noted that the school avoids thin clients due to compatibility issues with advanced software. They advised us to keep pace with technological changes to remain competitive in the job market.

Week 6: Cable Layout and Handling Challenges

Understanding the cable layout is crucial, as it determines the connectivity between switches and access points. Despite the prevalence of Wi-Fi, wired connections through the walls ensure stable internet access. The department regularly faces unexpected challenges, such as connectivity issues requiring immediate troubleshooting. They also handle daily complaints from students and faculty regarding passwords and internet problems.

Weeks 7 & 8: Regular Meetings and Professional AdvicE

The department frequently holds meetings to plan and discuss implementations. We were informed about the upcoming addition of a lab assistant to help us adapt to lab changes. We received valuable advice to document all projects, as they can serve as a significant part of our CVs in the future.

Key Lessons Learned

Documentation: Keeping a record of all work and utilizing cloud backup for safety and potential pay raises.

Continuous Learning: Utilizing resources like YouTube eg. Freecodecamp, leetcode etc. for ongoing education.

Upgrading Skills: Regularly updating our knowledge and skills to stay relevant.

Versatility: Embracing various aspects of IT and understanding the full scope of our roles.