

Concept of Computer Networks class taught us the different aspects of computer networking system. We took this class only after taking the concepts of hardware class. Similar to the hardware class, this class was also an online class with video lectures, demonstration videos, fact sheets, stimulated labs and practice quizzes. The data network consists of nodes, which refers to any computer or digital device using the network and links, the physical connections (either wired or wireless) that carry messages between nodes. The data networks are important to all organizations as they provide faster, easier access to any message or data that can be represented and stored in digital format. When an employee researches an issue relevant to the organization and share the data with others in a data format the computer recognizes, they can copy key information from the report into their own, saving significant amounts of time.

This class also taught us how to identify network cables, connector types, and the different networking standards common in a computer network today. We also learnt how to select and install the appropriate network interface cards for a particular network along with managing static and dynamic IP addressing and network protocols. The more advanced concepts that were taught in this class consisted of identifying wired and wireless network components and setting up a wired or wireless network. We learned how to configure network security, manage network traffic, and configure remote access to a network and most importantly we learned to troubleshoot common network issues.

The above artifact is a stimulated lab where we were configuring a DMZ. A demilitarized zone (DMZ) is a buffer network or subnet that sits between the private network and an untrusted network such as the internet. We create a DMZ by configuring two firewall devices, one connected to the public network and the other one connected to the private network. We then configure a single device with three network cards, one connected to the public network, one

connected to the private network, and one connected to the screened subnet. After that we configure the ARP so that the public interface of the firewall device responds to ARP requests for the public IP address of the device. In this particular lab, we configured the DMZ server to obtain the IP address and DNS address automatically and then we verified that the server receives the reserved IP address.

Similar to the Concepts of Hardware class, this class consisted of us doing numerous stimulation labs. Comparatively, I felt that the stimulation lab exercises for this class were easier than that of hardware. However, since there were a lot of chapters and concepts to cover, there were times when I felt like I could not give enough attention to one or more concepts. Overall, this class was very informative and helped me understand better about computer networks.