

Assignment 1-Fundamentals of computer networks

Faculty of Technological studies, Uva Wellassa University is planning to design and implement a state-of-the-art network infrastructure within its facility premises. The goal is to create a seamlessly connected environment that fosters collaboration, accelerates research, and ensures the smooth operation of advanced scientific experiments.

The computer laboratory stands as a technological hub, fostering collaborative learning and innovation. The laboratory boasts a collection of 20 high-performance computers. This network is being meticulously designed to interconnect these computers. At the core of this network lies a dedicated file server, intelligently configured to facilitate efficient file sharing among students.

Adjacent to the laboratory, a specialized server room is under construction to manage the laboratory's web server to host faculty web sites. This room is set to house the robust infrastructure required for hosting web-based applications and services.

Recognizing the importance of mobility and flexibility, the network design extends beyond the laboratory walls. A comprehensive Wi-Fi network is being established to cover the entire building, providing students and researchers with the freedom to connect their devices seamlessly.

Being in group of 10 students you are asked to present your network plan.

During the presentation you should discuss following details.

- Objectives of your network plan.
- Hardware Software requirement
- Design (Network Diagram, Topologies, etc...)
- Any special features you have added.

Presentation Date- 29th, 30th January 2024

Evaluation Criteria

Network Design	[15 Marks]
Presentation & Organization Skills	[05 Marks]