



CST 337: Network Configurations and Protocols Assignment 1

Group Members:

1. Name: _____ Matric No. : _____

2. Name: _____ Matric No. : _____

Assignment Objectives:

1. To explain the concept and planning of network services.
2. To implement and administer network services effectively.
3. To construct an efficient and manageable network environment.

Scenario Description:

You are a network administrator at a small company with 50 employees, and you are tasked with setting up a small-scale network to support the company's operations. The network should include various network services, such as DNS, DHCP, FTP, and email services, to facilitate efficient communication and data sharing among employees.

Requirements:

- ☐ Plan the network topology, including the type of network, the number of subnets, and their interconnections.
- ☐ Create a network diagram that illustrates the network's structure.
- ☐ Explain the purpose and function of each services in your network environment.
- ☐ Configure and implement the selected network services using Cisco packet tracer.
- ☐ Ensure that the network services are functional and properly integrated into the network.
- ☐ Discuss how your network design and configuration choices contribute to network efficiency and manageability.
- ☐ Analyse the network's efficiency and manageability.

Grading Rubrics:

Criteria	Weight	Excellent (70-100%)	Sufficient (52-69%)	Fair (36-51%)	Poor (0-35%)
Network design concepts, plan and implementation	20%	Student has presented well on the concept, plan and implementation with key aspects highlighted.	Student explains sufficient information on the concept, plan and implementation with key aspects highlighted	Student has presented fair information on the concept, plan and implementation with key aspects highlighted.	Student has presented poor information on the concept, plan and implementation with key aspects highlighted.
Overall network functionality and services	30%	Student have a good grasp of all parts of the network functionality and services.	Student have a sufficient grasp of all parts of the network functionality and services.	Student have only manage to provide some basic network functionalities and services.	Student have only manage to provide some minor functionalities and services.
Network configuration	25%	The whole network is properly configured.	Sufficient part of the network is properly configured.	Some part of the network is properly configured.	The network is not properly configured.
Efficiency and manageability	25%	The whole network is properly configured.	Sufficient part of the network is properly configured.	Some part of the network is properly configured.	The network is not properly configured.

Submission:

Please submit a **detailed report** and **Cisco Packet Tracer zip file** (two in a group) by **24th November 2023, 11.59pm**. The technical proposal should contain the following information:

Course : CST337

Assignment : 1

Group Members:

1) Name:

Matric No:

2) Name:

Matric No:

All assignments MUST be submitted before/on the given date. Late submissions without prior approval will not be accepted.

Plagiarism/pirating and copying are serious academic offence. Students that are found to plagiarize/or copying will get an F for the assignment/report or for the whole coursework grade.

Thank you