



Department of Computer and Information Engineering

CCEN 356 – Computer Networks

Fall 2024

Project (Phase I): Simple Mail Transfer Protocol (SMTP)

Implement Header, Send and Receive E-mails

Deadline: 21/10/2024

Project description:

You work in a company where Your team is asked to create an email server for the company. The problem that you must resolve consists of **transferring Mail** between one client and one server logged in to the network at different computers. Your team is asked to customize the email messages using the **UDP** protocol as a "delivery service" to carry your packets. You have to implement features to introduce reliability of delivering packets.

To kick start your project, you are provided with sample “Server” and “Client” codes where they open UDP sockets, the server enters the waiting state, and the client sends a message requesting the timestamp. Then, the server replies with the local timestamp. Your team is asked to implement part of the SMTP protocol, which is the SMTP send-message.

In this project you need to:

1. Make use of network Socket programming.
2. Create customized header fields for SMTP and exchange them through UDP packets.
3. Send emails to the server and verify successful emails by the server.

Note: Your team is provided with **Supplementary data** (read them carefully) to help you with the project.