

B205 Computer Networks

Messaging app

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GitHub page:

<https://github.com/Ahmed-Mohammed-x/ComputerNetworks->

[Mesaging-app](#)

Guide:

<https://youtu.be/RHxiG1YtHzQ>

Introduction:

This messaging implements some of the required functions mentioned in the assessment brief. It uses a client server architecture to let users communicate in real time. It has very basic implementation of user authentication

Important functions:

- **Real Time texting**
- **User authentication: very basic**
- **Contact management: users can choose and text users privately**

System Architecture:

- It has a server.py file to manage the server.
- It has a client.py file to manage users.
- It has database that server.py uses and client.py calls to make sure of authentic communication

Protocols:

- TCP/IP has been used to communicate as it is reliable and has guaranteed delivery which makes sure of data integrity and messages
- JSON has been used as it is easier to implement in Python

Code structure:

- I only made two files Client.py and Server.py ne to handle user interface and the server to hold the connection.
- You can make multiple client files to have multiple users

Future Features:

- Provide download functions and make sure to make the right changes to in both server and client files to make users be able to download them. Maybe another framework or protocols could make such improvements easier to build and more secure
- History implementation and add it to the database
- Password protection using cryptography
- Security checks and proper Error handling

Thank you :)