UNIVERSITY OF INFORMATION TECHNOLOGY

FACULTY OF COMPUTER NETWORK AND COMMUNICATION

Logo, company name

Description automatically generated

**REPORT**

Subject: Basic Network Programming

Semester II (2021 – 2022)

**Report Lab 6**

Student: Võ Anh Kiệt

Student ID Number: 20520605

Class: NT106.M21.ANTN

University of Information Technology

Lecturer: Đỗ Thị Hương Lan

**Hồ Chí Minh City, April 2022**

Report Lab 6

**Student Information**

Full Name: Võ Anh Kiệt

Student ID Number: 20520605

Class: ANTN2020

**Device Information**

CPU: Intel core i5 – 8250U @ 1.60 GHz

Ram: 16 GB DDR3L

SSD M2 SATA: 500GB

HDD: 1000GB

Display chip name: UHD 620

**Link Video:** [**https://drive.google.com/drive/folders/1G1qsWBf-PgL7-475xJT-gs\_FyKqysJly?usp=sharing**](https://drive.google.com/drive/folders/1G1qsWBf-PgL7-475xJT-gs_FyKqysJly?usp=sharing)

**Create the Encryption and Decryption class**

Using RSA 2048 and key “voanhkiet”

Text

Description automatically generated

Encrypt before sending

A screenshot of a computer

Description automatically generated with medium confidence

Decrypt when receiving

A screenshot of a computer

Description automatically generated with medium confidence

Catch the packet of message

Text

Description automatically generated with low confidence

The data have been encrypted before sending and decrypted when recieve

**Inheritance from Lab 3**

**Create chatApp has multi-room, multi-client replacing 4 tasks**

**DemoLibrary**

Set up the type for the object

Text

Description automatically generated with medium confidence

Set up the class packet

Text

Description automatically generated

Set up the chatPacket – inheritance class of packet

Text

Description automatically generated

Set up the nicknamePacket – inheritance class of packet

Text

Description automatically generated

**simpleServer**

**serverClass**

Declare the variable and the constructor

Text

Description automatically generated

Set up the start function

Text

Description automatically generated

Set up the socket method to create the socket to use for chatting

Text

Description automatically generated

**clientClass**

Declare the constructor and the GetSet function

Text

Description automatically generated

Set up the start and stop function

Text

Description automatically generated

Set up the sendFunc and the socket Method for using

Text

Description automatically generated

Set up the nicknameFunc and sendText

Text

Description automatically generated

Set up the main function in the program class

To change the the port, dumplicate the server file and then go the sln file and change the number, do it for 5 times to get 5 ports

Text

Description automatically generated

**simpleClient**

declare the variable and sendFunc

Text

Description automatically generated

Set up the function sendtext, nickname and the outputText

Text

Description automatically generated

Set up the process with the responding server

Text

Description automatically generated

Make the connection function to connect with the server

Text

Description automatically generated

Make the disconnection function to disconnect with the server

Text

Description automatically generated

**myRoom**

Set up the multiroom for the chatApp

Text

Description automatically generated

Name, address, port, connect and connectRoom class to get and set value

Text

Description automatically generated

Create the connection in main program

Text

Description automatically generated

Form for the chat room

Graphical user interface, application, Word

Description automatically generated

Set up the client form

A picture containing graphical user interface

Description automatically generated

Append the text function and and show the connect

Text

Description automatically generated

Refresh the list

Text

Description automatically generated

Set up the connection room

Text

Description automatically generated

Text

Description automatically generated

Set up the click

Text

Description automatically generated

Text

Description automatically generated

Login form

Graphical user interface, application, Word

Description automatically generated

Declarate the variable

Text

Description automatically generated

Get the data from the database and verify the login

Text

Description automatically generated

Go to the register

Text

Description automatically generated

Register form

Graphical user interface, text, application, email

Description automatically generated

Declare the variable

Text

Description automatically generated

Get the registration information and append it into access file 2002 – 2003 (mdb)

Text

Description automatically generated

Back to the login

Text

Description automatically generated

Deploy the chatApp

Login

A screenshot of a computer

Description automatically generated with medium confidence

Register

A screenshot of a computer

Description automatically generated with medium confidence

Using chatApp

A screenshot of a computer

Description automatically generated with medium confidence