## IMPLEMENTATION OF MULTI-USER CHAT ROOM PROGRAM USING JAVA APPLICATION

Prepared by: Ting Sze Chuo

## **ABSTRACT**

This project concerning a multi-user chatting program using Java application, which is built on two-tier client-server architecture. It is an implemented chatting program, which solvers some of the problems in the existing chatting programs. It functions on Local Area Network (LAN), where users can have real time chat with other users without Internet connection. It is produced after detailed investigation has been done for existing chatting programs, such as Internet Relay Chat (IRC), Yahoo Messenger and MSN Messenger. The functionalities and limitations of these chatting programs are being investigated to get the idea of implementation features, which will be included into the proposed system. Once the server runs, a number of clients can be connected to the server. The server can interacts with several clients simultaneously. This application supports multiple chat rooms, and it has the ability to send facial expression available to others to let them know the emotions of the user while chatting. For implementation feature, the client also can draw the images and type the text with the images they drawn and send to other client. This has increased the flexibility and usability of the system. Once log on to the system, the client can select another user available to have a private chat, in any chat room. There is also public chat, whereas the client can send the messages to all users in the chat room. For security purpose, the administrator can ban the users who offend the rules as settled in a particular chat room. The server will also detect and display all the activities by particular user using the "trace" user" function, they need to key in their nickname by clicking the "new user" button. The users' information will be stored and retrieved in user database.