

## **ABSTRACT**

Chatting application is one of Internet/ intranet service for activity one or more people who chatting or online communication in internet or intranet. Now, chatting application is still not much yet which support send pictures. Where that future is more needed because of that in this final task be made chatting application support send pictures in LAN in order that to know how send and insert picture file effect in Chatting Application. First step in making that application is design the protocol for chatting then applicates it. After that is added send pictures module. Programming in this final task is object oriented with UML language and java as programming language.

This application can measure send message and send file pictures to friends in room chat, for send file pictures use work principle forward error control method with convolution code viterbi algorithm in order file pictures has been send and needed bandwidth is little. Analysis is done on needed bandwidth so that application can work finely. In order application to be said suitable then needed minimalyed bandwidth so message and send file pictures can arrive finely which is not burden the network.

**Keyword : Chatting, file pictures, LAN, Forward Error Control, Convolution Code, Algoritma Viterbi, and bandwidth**