

## **Abstract**

VoIP( Voice over Internet Protocol ) technology is the future of telecommunication technology, where costs much cheaper than other telecommunication technology which usually used by people nowadays. During the development periods,the needs of people for technology become higher, especially for mobile telecommunication. as an example, everyone need to communicate wherever and whenever they are with a low price and it not only a direct communication between two persons but also communication with more than two persons in one session, or we can say a conference. Because of that need, in this final project, the research done to fullfill that need, with provides voice conference service, where users can comunicate by conference with cheaper cost but not limits the mobility of the users. Protocol which used for supporting this project is UDP (User Datagram Protocol), as the protocol in transport layer. This research also used multicast transmission on network layer, transmission methode by multicast make user do the conference easier. Hopefully the result of this research can create voice conference system which can be useful and fullfill the needs of the telecommunication technology users.

**Keywords:** Multicast, User Datagram Protocol (UDP), Voice over Internet Protocol (VoIP), Voice Conference