

## **ABSTRACT**

*In this era of Information and Communication Technology (ICT), wireless LAN (Local Area Network) technology now has become more applicative for mobile computing. This technology offer speed data access and efficiency for interactive application, such as VoIP and Video Call. With the method of multicast addressing, it can reduce Bandwidth (BW) overload in network and increase QoS. There are several wireless standards known, one of them is IEEE 802.11b. This wireless standard has benefit in network that has small BW. It has 11 Mbps of data rate and 2,4 GHz of frequency spectrum.*

*In access a service, the number of user will affect the Quality of Service (QoS) and network performance.*

*The simplicity of build a network, easy installation, and high mobility access are the advantages of using wireless technology than wired (LAN). But the disadvantage is it is not stabile for big network.*

*This Final Task will do the simulation and analysis of effect from user mobility toward wireless network performance for support interactive services. It will compare between static user with mobile user. Which is the number of user will be difference from each observe. To see the performance, the background of traffic generator will be used.*

*The result of this Final Task that the number of user, the background traffic, and user mobility was effect the network performance. Throughput value will be decrease if the number and mobility of user increasing, and the background traffic generator used. Delay and jitter value will be increase if the number and mobility of user increasing, and the background traffic generator used.*