ABSTRACT

Portable game devices have a quite expensive price and it's need an additional fee to add new games. Raspberry Pi has a lower price, it can be alternative to substitute portable game devices. Raspberry Pi is a series of credit card-sized single-board computers. Raspberry pi can be used for various purposes, such as making documents, process data with spreadsheets, watching movies, playing games and coding. Along with it's development, many creative projects using Raspberry Pi, for example Digital Picture Frame, Home Media Centre, Home Automation System, Micro Arcade Cabinet, Home Alarm Systems. The author will use rapsberry pi as Game Server. Game Server will be implemented by using lightweight game based on Flash accessible through WLAN (Wireless Local Area Network). Client can access game through smartphone that is connected to the server. Monitoring system is made to monitor mac address , ip address , access time and duration of client who connected to the server. Performance testing is using the parameter of the number of users and response time. The results of testing showed the game server successfully worked through testing by users who connected to the server. Realtime monitoring and log monitoring successfully implemented. *The result of testing showed Raspberry Pi being used as the server for game sevice with less than 100 users.*

Keywords: Raspberry Pi, Game Server, Wireless Local Area Network, Monitoring.