Abstract

In this final assignment will explain the implementation of wireless key controlling system using Bluetooth connectivity with data secure using DES encryption and hash MD5. Wireless communication usually susceptible of secure, so it will use the combination of DES encryption and hash MD5, because if only use DES encryption, the system will be weak. The DES encryption only using 64 bit of key. Hash MD5 will use to make message digest of user password and then it will use to generate key of DES encryption. The function DES encryption for cell phone is to encrypt ID Bluetooth and the function DES encryption for PC is to decrypt ID Bluetooth. Marginally the message which is an order to open and close key from cell phone will encrypt then it will be sent through Bluetooth to PC. From PC the message will decrypt and processed in such a way till if that message is correct then the key will be opened or closed and if that message is wrong then there will be feedback to cell phone. This application simulated with LED lamp and simple door through parallel port, which is expressing that the system process have succeeded.

Key words: Bluetooth, DES encryption, MD5, and parallel port.