KEYLESS LOCKER SYSTEM USING P.LC MICROCONTROLLER

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ABSTRACT

Abstract

This paper presents a Keyless Locker System which consists of main locker system, data communication via RS-232 and administrator remote desktop display. The EAGLE Layout editor version 5.4, schematic design software is used to design hardware schematic diagram of the project. The MPLAB IDE® version 8.7, software which was developed by Microchip Corporation® is used in programming a Peripheral Interface Controller (PIC) microcontroller and Visual Basic version 6.0, is used in programming the Graphical User Interface (GUI) for the system. Besides, three replica of locker are built to represent multi locker system hardware in reality. This real time simulation system is developed to simulate keyless method to operate locker system. Just keyless code is needed that provided to the user during registration at the desktop centre. User is allowed to choose any locker available. After keyless code is used to the chosen locker, that locker becomes exclusive to that user where that user can use it repeatedly until he terminated the service. As a result of the keyless system, this propose locker system is relevant and can be implemented in many places such as theme parks, shopping malls, sports complexes, education facilities, factories, hospitality and health sectors and other public access areas. This system is cost effective, convenient and provides efficient graphical monitoring display where the administrator can easily monitor the locker's remotely at monitoring centre.

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