Using IoT and Electronic Access Control to Enhance Crowd Management - Case Study: Holy Rawdha Entry

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Abstract:

This work proposes an electronic access control in order to manage the crowd. The innovated system is based on IoT techniques by using RFID technology, sensors and data analysis control unit. The case studied is the entry to the Holy Rawdha in Al-Masjid AL-Nabawi, Al-Madinah, Saudi Arabia. The paper illustrates several researches dealing with crowd management using modern technologies, then it explains the conditions should be taken into consideration while implementing the idea. A prototype based on Arduino board and sensors is made and all tests are carried to prove the advantages and limitation of the proposed access. Keywords:

Keywords:

IoT, RFID technology, electronic access control, Arduino, crowd management, Holy Rawdha.