An Internet of Things Example: Classrooms Access Control over Near Field Communication (2014)

TÃ-tulo: An Internet of Things Example: Classrooms Access Control over Near Field CommunicationAutores: Â Daniel Palma, Juan Enrique Agudo, HÃ©ctor SÃ¡nchezÂ and Miguel MacÃ-as MacÃ-asRevista:Â Sensors Vol./Pag.:Â 14(4), 6998-7012Ed./AÃ±o:Â MDPI, 2014DOI:10.3390/s140406998ISSN:Â 1424-8220Abstract:

The Internet of Things is one of the ideas that has become increasingly relevant in recent years. It involves connecting things to the Internet in order to retrieve information from them at any time and from anywhere. In the Internet of Things, sensor networks that exchange information wirelessly via Wi-Fi, Bluetooth, Zigbee or RF are common. In this sense, our paper presents a way in which each classroom control is accessed through Near Field Communication (NFC) and the information is shared via radio frequency. These data are published on the Web and could easily be used for building applications from the data collected. As a result, our application collects information from the classroom to create a control classroom tool that displays access to and the status of all the classrooms graphically and also connects this data with social networks.

Keywords: Internet of Things; NFC; Arduino; sensors; smart environment; classroom access contr