

Abstract

Title: A Web-based User-Interface for Internet of Things Device Management

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With the growing advances in the Internet of Things (IoT) technology, which combines various devices with distinct functions, capabilities, and communication protocols, it is essential to provide a platform that enables IoT users to interact with their IoT devices directly and be able to manage them effortlessly via that platform from various locations at any time in order to protect their privacy when using IoT devices. In this study, we are aiming to provide a web-based user interface that can address that challenges and provide real-time data control; hence, we have created a user interface prototype, which can demonstrate the concept of IoT manager websites and provide a proof of concept implementation. As the proposed platform is intended to contribute to improving users' perception of the IoT devices. Furthermore, the experimental and survey methods are used in this study to assess the participants' perception of using one platform that combines all of their IoT devices and enables