Abstract

The progress in medical technologies is one of the main contributions to the aging population. Most of the elders have chronic diseases and they need to take medications for a prolonged period of time in order to stabilize their conditions. So medication safety for the elderly is extremely vital. The most commonly encountered situations of drug abuse are excessive drug usage and disobeying the medication instructions. We have developed a device called "smart pillbox" to help the aging population to consume the right medication at the appropriate time according to their requirements. This system improves the existing system by alerting the user at the particular time again by setting the count each time and the order for the particular pill is sent by the system automatically to medical shop through message gateway and email.

References

1. Juan Marcelo Parra 1, Wilson Valdez, Andrea Guevara, Priscila Cedillo, Jose Ortiz
Segarra, "INTELLIGENT PILLBOX: AUTOMATIC AND PROGRAMMABLE ASSISTIVE TECHNOLOGY DEVICE", Proceedings of the IASTED International Conference Biomedical Engineering (BioMed 2017).

2. "An Electronic Pillbox for Continuous Monitoring of Medication Adherence", Tamara. L. Hayes, Member, IEEE, John M. Hunt, Member IEEE, 28th IEEE EMBS Annual International Conference New York City, USA, Aug 30-Sept 3, 2006.

3. Huai-Kuei Wu, Member, IEEE, Chi-Ming Wong, Pang-Hsing Liu, Sheng-Po Peng, Xun-Cong Wang, Chih-Hi Lin and Kuan-Hui Tu "A Smart Pill Box with Remind and Consumption Confirmation Functions", 2015 IEEE 4th Global Conference on Consumer Electronics (GCCE).

4. S.-C. Huang, H.-Y. Chang, Y.-C. Jhu and G.-Y. Chen, “The intelligent pill box-design and implementation,” in proceedings of the IEEE International Conference on Consumer Electronics, May 26-28, Taiwan.

5. G H.-W. Kuo, “Research and Implementation of Intelligent MedicalBox,” M.S. thesis, Department of Electrical Engineering, I-Shou University, Kaohsiung, TW, 2009.

6. J. H. Brown, P. E. N. Knowles, F. Booth, and H. C. Post, "United States Patent" 909628, 1980.

Index Terms
Computer Science
Information Systems

Keywords

Smart Pillbox, Medication Reminders, IoT, Order for pills, Message Gateway and Email, Arduino Wemos D1R1.