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AN EFFICIENT PROPOSAL FOR MANAGING OF AUTOMATED DEVICES BY AN ONLINE SOCIAL NETWORK

SURESH BALLALA[1]
HOD
Dept of Electronics & Communication Engineering
Sri Indu Institute of Engineering &Technology,
Hyderabad, Telangana.
ecehod.siiet@gmail.com

BURGENTI VANI[2]
PG Scholar
Dept of Electronics & Communication Engineering
Sri Indu Institute of Engineering &Technology,
Hyderabad, Telangana.
vani470@gmail.com

Dr.I.SATYANARAYANA[3]
PRINICPAL
Dept of Electronics & Communication Engineering
Sri Indu Institute of Engineering &Technology,
Hyderabad, Telangana.
principalsiiet@gmail.com

ABSTRACT:

In the recent times, of advanced technology, everything that is used is automatic. There are efficient household devices as well as technologies that are being developed thus automation as well as technology together, if resourceful, can be a huge contribution. We focus on key of power which is a method for controlling of automated devices which are functional to resourceful process that magnifies the efficiency. We suggest usage of Raspberry pi for receiving of messages from user twitter account across Internet for controlling of household appliances. Home automation that is implemented by means of Raspberry pi is consistent as well as strong. The algorithm that is implemented within the pi listens to request as well as sends acknowledgement towards user instinctively based on content of message that are received. For exhibition light-emitting diode were used, that shows circuitry is realistic as well as consistent.

Keywords: Automated devices, Light-emitting diode, Raspberry pi, Internet, Twitter account, Household appliances.

1. INTRODUCTION:

Our daily lives are becoming so fast that requirement for automatic voice control within cars has turn into a requirement. Regardless of how automated machines are, some type of control is required in support of decision of when they need to be switched on or else switched off. While machines are relatively resourceful, man holds key towards powerhouse and, in reality it's extremely flattering to consider in this way [1]. Our work focus on key of power which is a method for controlling of automated devices. Automation which is applied to resourceful process magnifies the efficiency. There are well-organized household devices and the technologies which are being developed in the entire world. Hence automation as well as technology together, if resourceful, can be a huge contribution. Because, it would denote more freedom, more occasions in hands that are used for useful task and simultaneously automation is done the means that is simple and by means of a method which is preferred by everybody. In our work an additional feature was added in Social Media that is twitter. The usage of Twitter later adds to simplicity of control and increases security and the important benefit in this case, is simplicity within usage and increases user responsiveness [2]. This paper deals with the system of household computerization that is installed by means of Raspberry Pi. The system is developed with twitter, which is an online social network that is used for sending of direct-messages towards raspberry pi which performs a task accordingly by examining the messages.

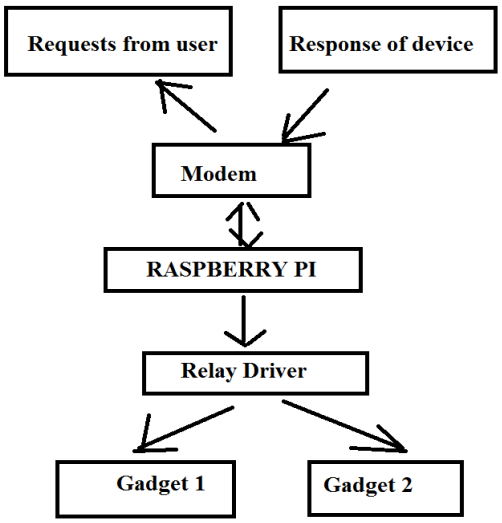

Fig1: Proposed system configuration

2. METHODOLOGY:

Raspberry pi model B+ is a variant which has better specs like improved General-purpose input/output pins, additional Universal Serial Bus slots as well as micro Secure Digital and this representation is more flexible by means of decreased power expenditure. Our work suggests usage of

Raspberry pi for receiving of messages from user twitter account across Internet for controlling of household appliances. Raspberry Pi is a credit card sized microcomputer which contains unimaginable applications and it can be exploited based on the needs of an individual. The algorithm that is implemented within the pi listens to request as well as sends acknowledgement towards user instinctively based on content of message that are received. For exhibition light-emitting diode were used, that shows circuitry is realistic as well as consistent. Our work adds an additional feature in Social Media that is twitter. In the times of social media as well as gadgets, automating devices by means of a social network is going viral. The extraordinary opportunities to improve relatedness of gadgets inward native for reason of household automation above Internet are thus far be studied. The system configuration includes gadgets that are associated across relay driver towards Raspberry pi [3]. The relay is employed to turn on as well as off devices by means of a low voltage circuit and pi functions as an interface among devices as well as Internet. The component of Modulator Demodulator (MODEM) assists to obtain requests from user as well as reply accordingly by means of python algorithm implemented within pi. The layout of the projected configuration of system was ripened however this methodology is primitive. Sriskanthan et al. has popularized the system of home automation which makes usage of Bluetooth, understanding single elementary controller as well as multitude of Bluetooth sub-controllers. AI-Ali et al has refined the system of home automation by means of Java that provides an indestructible solution.

3. AN OVERIVEW OF PROPOSED SYSTEM:

The system of home automation is developed. Initially a twitter account for 1308 Raspberry pi is formed and an application of twitter is created to use it for system. The algorithm is developed within python along by Twython which is package in support of usage of twitter facilities such as the status of updating, reading tweets, sending with receiving direct messages. The program initially obtains permission to make use of twitter by means of submission of customer key, access token, customer secret as well as access token secret in support of twitter application [5]. The direct messages are employed rather than tweets in support

of security then direct message from particular sender or else approved sender is perused and message which is received is analogized with predefined situations that are used to work gadgets associated to General-purpose input/output pins. These pins are used as an input pin or else an output pin hence General-purpose input/output pins are employed to turn on different gadgets. We spotlight on key of power which is a method for controlling of automated devices. Automation which is applied to resourceful process magnifies the efficiency. Our work uses Raspberry pi for receiving of messages from user twitter account across Internet for controlling of household appliances. The algorithm within pi listens to request as well as sends acknowledgement towards user instinctively based on content of message that are received. For showing light-emitting diode, that shows circuitry is realistic as well as consistent. In the Raspberry PI General-purpose input/output pin layout, two pins are utilized to manage two gadgets. Light-emitting diodes are used as gadgets to determine practicability. The system configuration comprises of gadgets that are associated across relay driver towards Raspberry pi. The relay is employed to turn on as well as off devices by means of a low voltage circuit and pi functions as an interface among devices as well as Internet. The pins that are used are pin 12 as well as pin 38. The task of analogizing is replicated by means of time lapse of 1 second. The control structure of algorithm projected is programmed within python here, direct message that are received is stored up within an array message, and control arrangement is defined whence. When the direct message is engage gadget one, then raspberry sends direct message towards sender as gadget one is engaged and simultaneously gadget at pin38 is activated, following this it loops back yet again checking for novel messages by means of a gap of one second.

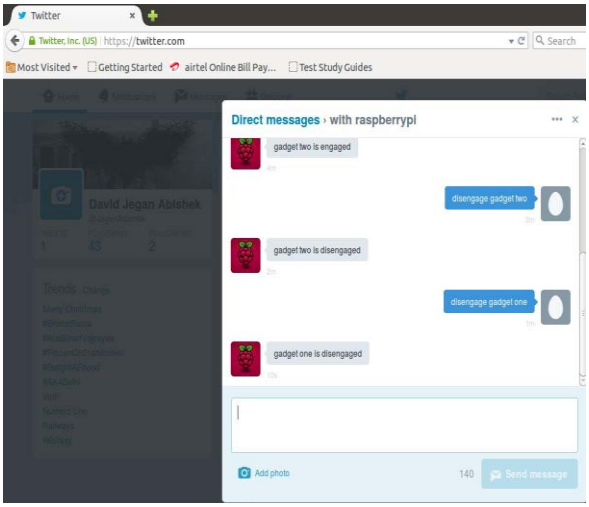

Fig2: Screenshot of interaction among user as well as raspberry pi twitter account

4. CONCLUSION:

In the times of social media as well as gadgets, automating devices by means of a social network is going viral. However the recent as well as remarkable opportunities to enhance the relatedness of gadgets inward native for reason of household automation above Internet are thus far be researched. We focus on key of power which is a method for controlling of automated devices. Automation which is applied to resourceful process magnifies the efficiency. Our work put forward usage of Raspberry pi for receiving of messages from user twitter account across Internet for controlling of household appliances. Raspberry pi is a safe bet in this age of technological development. The usage of Twitter later adds to simplicity of control and increases security. The important benefit in this case, is simplicity within usage and increases user responsiveness. The field is so far to be studied and has huge possibilities for additional investigation. The algorithm that is implemented within the pi listens to request as well as sends acknowledgement towards user instinctively based on content of message that are received. For showing light-emitting diode were used, that shows circuitry is realistic as well as consistent.

REFERENCES

[1] Ardam H. and Coskun I., "A remote controller for home and office appliances by telephone", IEEE Transactions on Consumer Electronics, vol. 44, no. 4,pp. 1291-1297, 1998.

[2] Baudel T. and Beaudouin-Lafon M., "Charade: remote control of objects using free-hand gestures", Communications of the ACM, vol. 36, no. 7,pp. 28-35, 1993.

[3] Saito T., Tomoda I., Takabatake Y., Ami J. And Teramoto K., "Home Gateway Architecture And Its Implementation", IEEE International Conference on Consumer Electronics, pp. 194-195, 2000.

[4] Sriskanthan N. , Tan F. and Karande A. , "Bluetooth based home automation system",Microprocessors and Microsystems, Vol. 26, no.6,pp. 281-289, 2002, www.raspberrypi.orgjarchives/tagjraspberry-piuser-guide

[5] YoonD. ,BaeD., Ko H. and Kim H., "Implementation of Home Gateway and GUI for Control the Home Appliance", The 9th International Conference on Advanced Communication Technology, pp. 1583- 1586,2007.

AUTHOR'S PROFILE

Mr. Suresh Ballala is presently working as Associate professor & HOD of Electronics and Communication Engineering in prestigious Sri Indu Institute of Engineering & Technology, Hyderabad, India. He obtained M.Tech in Digital Electronics and Communication Systems from JNTUH. B.Tech from

Basaveshwara Engg. College, Bagalkot, Karnataka University. He won Third prize in a seminar contest organized by Asia pacific telecommunications young professionals and students forum, Ministry of Information Technology in association with BSNL at IETE-. From last 17 years he is guiding the students in Enhancement of Embedded Systems.

B.VANI M.Tech student Scholar, pursuing M.Tech in Electronics and Communication Engineering in prestigious Sri Indu Institute of Engineering & Technology, Hyderabad, India.

Dr. I. Satyanarayana is presently working as Principal in prestigious Sri Indu Institute of Engineering & Technology, Hyderabad, India. He obtained Ph.D from JNTUH, Hyderabad, India. He obtained M.Tech from IIT-KGP. From last 18 years he is guiding the students. He is also a member of FIE, MISTE, and MISHMT