ANDROID BASED VOICE CONTROL HOME APPLICATION

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Abstract: **The concept of 'ANDROID BASED VOICE CONTROL HOME APPLICATION' reduces the time and an effort of Humans, by using this we can control a fan, lights, a t.v, Ac, etc... And it also provides some other features like alarms, a security, etc. Now a days there are many types of a home application like, a radio frequency controller a remote controller, a Bluetooth controller, a node MCU, etc. Now, in this project, we used an Arduino with a Bluetooth control. The aim of the project is to help the physically differently able people and old people.**

In modern days most of the electronic devices having Bluetooth support.With the help of android based voice control home applications we can access the electronic devices using AMR application ,we can simply download the AMR app from the play store. Now a days we are all using android mobiles so the operation of android based voice control home applications can be easy and the user interface is user friendly so the normal people can easily understand function of the device.

This device uses Arduino UNO micro controller,which establishes the platform between the electronic devices and the android mobile phone.Which enables the user to direct the command using our voice control.

I. INTRODUCTION

Our project is very useful for the old people , handicap people ,blind people .Why because this project helps these kind of people to operate their home appliances like fans ,t.v's etc.. to sit at one corner of their homes. We are using Arduino UNO , Bluetooth Module and mobile app to operate home appliances through voice control. We can control every appliance in his/her home with this own voice. The circuit consists of Arduino UNO ,step down transistor,relays ,power supply it perform very well .

GENERAL

Physically differently able people are not able to do simple things on their own like turn on and off fan, light, t.v,ac.etc.,their need another person assistance to that things. It reduces the liberty of the human being and these people has to be depend on other persons to full fill their basic needs. situations like these feels them insecure, they need an virtual assistance to lead their life.Virtual assistance will make big impact on their lives. At helps them to simplify their day to day life.

Old age peoples are also can't do their works on their own because of their poor eyesight and their slow adaptation to the regular things and they also need virtual assistance to lead their day to day lives.

normal people can also use the advantage of this virtual assistance to reduce their time and effort user can enjoy the feature like sit back and run their lives with simple commands.

ADSORPTION

Handicapped people and old age people need another people assistance to lead their day to day lives. Most of the people are not able to hire the care taker because of financial problems and security problems. they need an automatic voice assistance at low price and more effective.

II LITERATURE SURVEY

[1] K. Hareesh , In the market there are variety range of android based voice control home application but they are expensive and there not user friendly according to our survey our android based voice control home application is very cheap and easy to maintain. As we are using Arduino micro control, we can design the system according to our will.
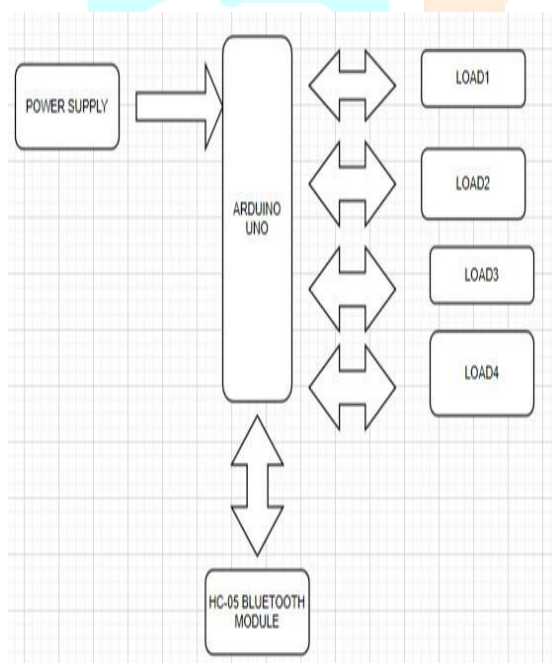
[2] T. Sai Krishna ,As the sensors are very cheap and the equipment is cost effective this makes the system very economical and it will reach to more number of Physically differently able people and old age people. We can say that the android based voice control application well play major role in our future generation.

[3]DR. Swati Nikam , According to our survey the present 4G&5G networks are not fully capable of the android based home application, the 6G network bring this feature to our home.
Researchers said that the 6G will came into an action in 2045,this will makes the human lives more sophisticated.

[4] Albin Thomas,As we are using Arduino micro control, we can design the system according to our will. We can say that the android based voice control application well play major role in our future generation. that the 6G will came into an action in 2045,this will makes the human lives more sophisticated.

III BLOCK DIAGRAM

POWER SUPPLY

The input to the circuit is applied from the RPS. The AC input i.e.., An 230 V from the mains supply the mains supply is a step down by the transformer to an 12 V and is fed to rectifier. The output obtained from the rectifier is pulsating DC voltage different types of transformer. So in an order to get pure DC voltage, the output voltage from the rectifier is fed to filter to remove any AC components preset even after a rectification. Now, this voltage is given is a voltage is given to voltage regulator to obtain pure constant DC voltage.

ARDUINO

ATmega328 Arduino UNO micro controller board as shown in figure5.2,it is used in the designed system.14 pins are present in unit, which allows outflow and inflow of feeding, a universal serial Bus port,6 continue signals with time changing quantity, an on-

board voltage regulator,16 Mega Hertz electronic oscillator, a power connector, ICSP header, and a reset button .The ATmega38 micro controller has 32 kilo bytes flash memory,1 kilo bytes EEPROM and 2 kilo bytes SRAM.
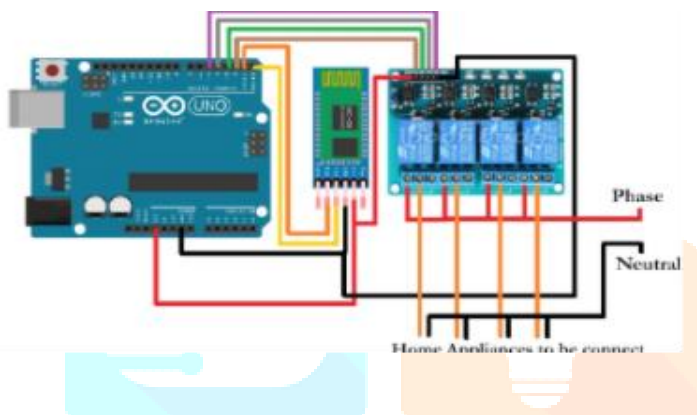
RELAYS

Relay is a one type of switch it is have 12v power supply. we can use the four channel relay board. The relay board is we can do own circuit is less cost it is used in Arduino ,raspberry pi ..etc, .this board is more convenient board it have high voltage ,high current ,motors, TV's ,lights, .etc.

HC-05 BLUETOOTH MODULE

HC-05 Bluetooth module is a one type of wire less communication network it the range of <50 meters. Bluetooth is used for headphones, speakers, mouse.etc it is a six terminal pins 1.data mode,2.VCC,3.GND,4. TXD,5.RXD,6.Start. HC-05 have red led it indicate the connection statues one's the Bluetooth is connected led will off when the command is tell one second led blink and off .

IV CIRCUIT DIAGRAM

V RESULT

The micro controller takes the input by analog in nature, The arudino uno board have 8 channels and the devices of 10bits,that used to convert analog voltage on a pin to digital pins. The program has been dumped into the Arduino micro controller .We have to install the AMR app in your android mobile phone and the device has to be connected to the mobile phone via Bluetooth. The mobile phone will act as a receiver. First we have to give the voice command via mobile phone and it will gives to the Arduino micro controller. Which converts analog to digital signal and the converted signal has been compared to the code that we given previously and it will generate the necessary action.

S.NO	List of components	specification
1.	Power supply Board	
	Step down transformer	230v
2.	Arduino uno Board	ATMEGA 328P
3.	Relay board	
	Relay	5v
	Tansistor	2N2222a
PN Diode		1N4007
	resistor	1kohm
4.	HC-05 Bluetooth Module	

Table 1:Android Based voice control Home Application

VI CONCLUSION

The android base voice control home application is used for Physically differently able people and old age people to make there life more easy this will helps them to do regular things like switch on fan,tv,ac,light..etc.without another person assistance. It also helps the normal people to do such types of things with less effort and makes time conservative. This is going to be our future technology an makes us more interactive when the 6G came into action.

According to the researchers the 6G will came into an action in 2045.This will makes us to things with less effort a time conservative. The present device only limits to certain range ,when we add inter net connection we can operate the devices when we are not in the home.

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