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Synopsis

On



**Smart Home And Security System**

Mini Project

For

Partial fulfillment of

B.tech Computer Science in Engineering

Session (2020-21)

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**Introduction**

Technologies taken most part of human lives for optimizing day to day chores and monitoring surrounding to facilitate all services for maintaining daily routine. From time to time with upcoming generations has become a magnet for innovative ideas that leverage technology to solve society’s problem efficiently and effectively. In the era of information technology, from top to bottom humans are surrounded by numerous digital prototypes having potential to make their lives cumbersome to operate each appliance having its own control or remote control. Humans always feel to operate all home appliances remotely with single control system when he is away from his own native place.

Humans need an interface to interact with every things and controller to control the working of device so as to effectively manage the process which positively affect environment and helps to produce the desired output which results in completion of user and machine goal. An interface allows creating both configurations for the controller and creative user interaction design module and control panels that allows to interact with devices and to control them.

### **Applications**

* Using this project, we can turn on or off Room Light remotely i.e. using a phone or tablet.
* we can turn on or off Room AC and Fan remotely using a phone or tablet.
* The project Smart Home And Security System including some sensors like light sensors, temperature sensors, safety sensors,PIR motion sensor,smoke sensor etc. and automatically adjust different parameters like room lighting, air conditioning (room temperature), door locks etc. and transmit the information to our phone.

**Hardware and Software to be used**

**Hardware to be used**

1. Arduino Uno
2. Arduino cable
3. Jumper wires
4. 4-channel relay
5. Wifi module
6. Smart Phone
7. Prototyping board (Bread board)
8. PIR Motion Detection sensor
9. Buzzer alarm
10. Camera
11. Smoke sensor

**Software to be used**

1. Arduino IDE Software
2. Android App

**Scope of the Project**

As in future up to 75 billion devices will connect to IOT. So it has a vast future. Every devices of our daily use is connected to internet as it communicates with humans. For future work, is that to bring this device on server so that the use can control the devices from anywhere in the world. They have no boundary of range.

**CONCLUSION**

Smart Home And Security System is good resource of future as it makes home environment fully automated. People can control their home devices and control them through their mobile phones. A security System designed to detect unauthorized entry in home.This product is cheap as it has high potential of marketing in future because from people from higher class to lower class can afford it.

**Reference**

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* [www.electronicshub.org](http://www.electronicshub.org)
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