Room Configurations

2 BHK Apartment

3 BHK Apartment

West facing flat

- ⦿ Motion Sensor
- ⬡ Main Control Block
- ▭ Room control block
- ★ Fire, smoke sensors
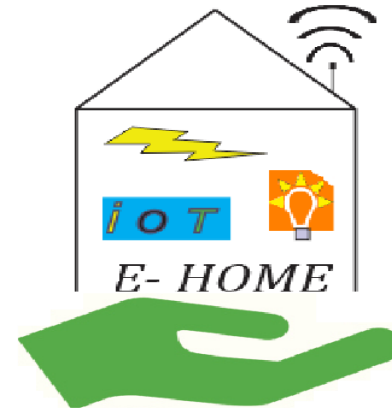
4 BHK Apartment

eHome: An Integrated Solution for Home Automation and Energy Conservation

A Proposed Startup from IGDTUW

iOT
E- HOME

Kitchen Node

Contact Details

Contact Person: Dr. SRN Reddy, IGDTUW, Delhi
Proposed Team: Rachit and Mansi
Weblink:mobileeducationkit.net/homeautomation_ehome/
Email: ehomeigdtuw@gmail.com
Ph. No. 01123900253
Mobile No. 8527136215

Key Aspects

➢**Centralized control** of lighting, HVAC (heating, ventilation and air conditioning), appliances, security locks of gates and doors and other systems.

➢**Increased quality of life** for elderly and disabled persons who might otherwise depends upon someone else for their day to day activities.

➢**Convenience for end-users** to manage their household activities.

➢**Reduction of energy consumption** and provision of improved **home safety**

➢**Prevention against criminal activities** such as robbery, theft, etc.

System Features

➢**Miniature nodes** deployed at different locations in a room/house

➢**Cost effective and affordable** system for Indian users.

➢**Anytime, any level scalability**

➢**Heterogeneous nodes** for meeting low cost criterion

➢System to operate on a number of **available communication interfaces with ease**

A. Basic Solution

eHome Basic solution	Relay PCB for 3 control	Relay PCB for 2 control	Room control block	Entity control block	Main Control block *	2BHK	3BHK	4BHK
Raw material cost	110/-	80/-	1000/- per room	1200/-	Rapberry pi base system 4500/-	110x3+80x3 +1000x4+1200x2+4500= 11,470/-	110x4+80x4 +1000x5+1200x3+ 4500= 13,860/-	110x5+80x5+ 1000x6+1200x4+4500= 16,250/-
Market cost						22,940/-	27,720/-	32,500/-

B. Hybrid Solution

eHome Hybrid solution	Relay PCB for 3 control	Relay PCB for 2 control	Room control block	Entity control block	Main Control block *	2BHK	3BHK	4BHK
Raw material cost	110/-	80/-	1000/- per room	1200/-	Rapberry pi base system 4500/-	110x3+80x3 +1000x4+1200x2+5500= 12,470/-	110x4+80x4 +1000x5+1200x3+ 5500 = 14,860/-	110x5+80x5 +1000x6+1200x4+5500= 17,250/-
Additional sensors Fire, Smoke			1000/-	1000/-		6000/-	8000/-	11,000/-
Market cost						30,940/-	37,720/-	45,500/-