TOP STUDENT PROJECTS

Best innovations from VTU, Muddenahalli

PROJECT TITLE

SMART HOME AUTOMATION USING ARDUINO

Team 49- Creative crew

1.KEERTHANA 2.RANJITHA
3.DEEPIKA 4.PARTHIV
5.SHREYAS 6.SANDEEP



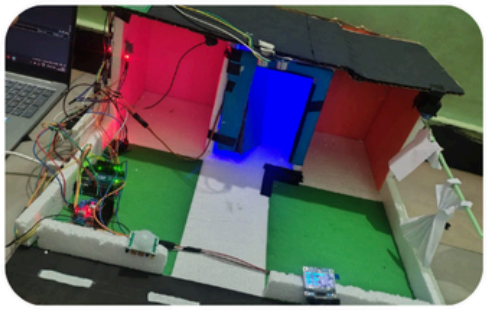


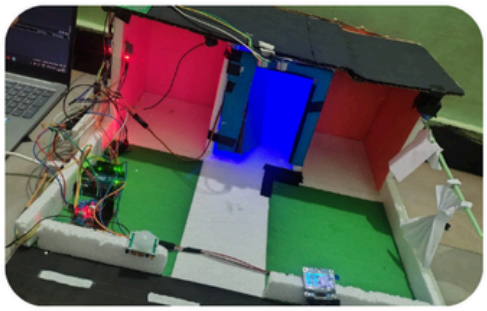
PROBLEM STATEMENT

The rapid growth of technology has increased the demand for comfortable, secure, and energy-efficient living environments. However, most conventional homes still rely on manual control of electrical appliances such as lights, fans, and security systems, which can lead to energy wastage, inconvenience, and reduced safety. There is a need for an intelligent system that can automate and control household devices efficiently.

SOLUTION

home automation solution integrates various smart devices, sensors, and control systems within a house to improve convenience, security, energy efficiency, and comfort. It works by connecting devices such as smart lights, thermostats, fans, door locks, security cameras, motion sensors, and household appliances through a central controller or mobile application. Users can monitor and control these devices remotely using smartphones, tablets, or voice assistants, allowing automated operation based on predefined schedules, environmental conditions, or user preferences. For example, lights can automatically turn on when motion is detected, air conditioning can adjust according to room temperature, and security systems can send instant alerts when unusual activity is detected. The solution often uses technologies such as Wi-Fi, Bluetooth, Zigbee, or IoT platforms to enable communication between devices





SCAN ME

Technology stacks:

HTML,CSS | Javascript | Springboot | SQL