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Smart Home Powered by Solar Tracking Panels

Abstract

A smart home is made to make the owner completely comfortable, as he can control his home remotely via his phone, and also to increase security through monitoring sensors. Using this large amount of technology means a high electricity bill, so we used solar panel energy.

Ojective and Scope

One of the main objectives is to ease daily life by increasing user comfort. It does this by automating typical routines as well as giving homeowners the power to manage their home systems remotely. By automating many aspects of daily living through remote technology, a smart home provides the ability to control electronics and appliances from a smartphone, tablet or laptop. It adds an extra level of convenience and comfort while eliminating the burden of manually maintaining home systems.

Technologies

Arduino
microcontroller

Relay circuits

Application

Bluetooth

Sensors :
gas, motion, Water
clarity

Design



Future Work

Future extension
1. Skills development
2. Energy storage innovations
3. User experience enhancing.

Conclusion

In conclusion, combining IoT and solar tracking panels in smart homes promotes sustainability, optimizing energy use and creating a tech-savvy and friendly living space.

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