GESTURE CONTROLLED CONTACTLESS SWITCH

-HOME AUTOMATION

Presented by -

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DESCRIPTION

- In this project ,we controll home appliances like fan, bulb etc.using Gesture.
- APDS 9960 sensor is used to control Gestures.
- In this project three appliances BULB and FAN had been controlled.
- Right and Left Gestures are used to change the devices.
- Same way UP gesture is used to ON Device and DOWN gesture is used to OFF Device.

COMPONENTS REQUIRED

- Arduino Uno board
- APDS 9960 Sensor (offers ambient light and color measuring, proximity detection, and touchless gesture sensing)
- 16×2 LCD I2C
- Relay Driver board (ULN2003)
- Jumper wires
- 9V Battery
- Battery Connector
- Battery to Arduino Connector
- Fan, LED

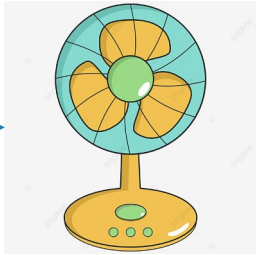
APDS 9960 SENSOR

DETECTS GESTURE UP/DOWN LEFT/RIGHT

ARDUINO UNO

LCD DISPLAY

CHANNEL RELAY



Future application and development

- Avoid the switch becoming the hotbed of virus transmission
- Can be applied to smart watch and smart devices for easy control
- Image processing and machine learning can be applied for more accurate control of gestures
- Control the devices with a wave and nod

THANK YOU