

## Problem

People usually leave their fan running through the night while they sleep. But sometimes they wake up needing to turn it off because it's too cold.

Also in offices and homes a lot of power is wasted because of fans running when people aren't using them.

## Solution

A **universal** smart plug that connects at the power supply to the fan. This provides the following features:

- Ability to set a *temperature* and *humidity* at which the fan automatically turn ON/OFF.
- Ability to set a *timetable* for the fan to turn OFF automatically.
- Ability to control fan through a *mobile phone*.

## Components (Electronic)

- Microcontroller (ATmega 328p)
- Relay module-MD0486
- HC 05 bluetooth module
- DHT11 Temperature and Relative Humidity Sensor Module
- LCD 1602 screen

## Extensions

- This device can be used with any electrical appliance to make the device turn ON/OFF only during a set timetable using a mobile phone.

