Smart Office

Md Mehedi Hasan



**Project name:** Smart Office

**Project features:**

1. **RFID Based Door Lock:** Door can be unlocked only by using valid RFID card. If anyone wants to enter in the office, he or she has to show RFID. If the RFID is valid, the door will be opened, otherwise not.
2. **Smart Window, based on light and rain:** Smart Window which will be opened automatically when it’s morning time and there is no rain using rain sensor, photo sensor. If it’s night the window will be closed to avoid the mosquitoes even if there is rain.
3. **Solar Power battery charging:** Basing on solar power, fan and light will be running automatically. But, if the battery power finishes, they won’t be running. The battery only charges itself when there is sufficient light.
4. **Anti-theft protection:** To provide anti-theft protection trip sensor is being used, if anyone breaks window and enters trip sensor will give siren as alert.
5. **Auto fan & coffee maker:** When anyone enters the canteen, fan and coffee maker turns on itself detecting the motion.
6. **Music player:** Music can be played using music player via Bluetooth on a portable speaker. Entertainment purpose.
7. **Smart street lamp:** Turns on when it’s night using photo sensor. Energy saving.
8. **Smart garage:** Opens itself when detects smoke, means the car is turned on. Either it will be entering or going out. Garage door closes itself when there is no smoke, means either car is far or it’s turned off inside the garage.
9. **Fire alarm & smoke alarm:** If anything catches fire, the fire detector will give siren to alert everyone. If ridiculous amount of smoke is generated by vehicle, smoke detector will siren alert.

**IOT devices:** Fan, light, Window, Garage, Door, Battery, Siren, Solar panel, Appliance, Portable music player, Motion Detector, Street lamp, Old car, Fire monitor, RFID card, RFID reader, Trip sensor, Fire sprinkler, Smoke detector.

**Sensors:** Custom made rain sensor, Photo sensor, Smoke sensor.

**Actuators:** Led, speaker, alarm.