

<https://www.youtube.com/watch?v=93XragsjpXg>

OTP Based door lock using Arduino and Bluetooth

Security is a major concern in our day-to-day life, and digital locks have become an important part of these security systems. There are many types of security systems available to secure our place. Some examples are PIR based Security System, RFID based Security System, Digital Lock System, bio-matrix systems, Electronics Code lock. In this post, we will Interface an OTP based Security System with door Lock/Unlocking. Finger Print is considered one of the safest keys to lock or unlock any system as it can recognize any person and sending OTP to the user mobile using Bluetooth technology.

The main aim of the project is to design an OTP based door locking system using Bluetooth technology. Instead of carrying a bunch of keys wherever you go, as you just have to use OTP to unlock/lock the door using android mobile. To Lock/unlock the door he/she need to send the OTP by using Bluetooth mobile application.

Main objective of this project:

- OTP based real time security system.
- To lock/unlock the door using Bluetooth technology.
- Visible alerts using LCD display.
- Using Arduino UNO to achieve this task.

The main building blocks of the project are:

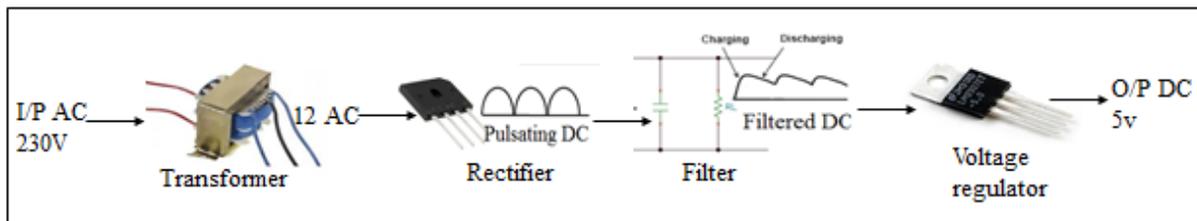
- Arduino UNO microcontroller.
- Adapter power supply.
- HC-05 Bluetooth module.
- IR sensor.
- Keypad.
- Relay along with Solenoid lock.

- LCD display.

Software's used:

1. Arduino IDE for compiling and dumping code into controller
2. Express SCH for Circuit design.

Regulated power supply:



Block diagram:

Block Diagram

