**BANK LOCKER SECURITY SYSTEM WITH PASSWORD AND INTRUDER ALARM**

**DESCRIPTION:**

The main aim of this project is to provide efficient way of security for banks, Which is an advanced door lock system used in the fields where security and secrecy is the primary constraint.

Security is a prime concern in our day-to-day life. Everyone wants to be as much secure as possible. An access control for doors forms a vital link in a security chain. The microcontroller based digital clock access control system that allows only authorized persons to access Doors. It is low cost easy to implement concept by using an 8051 series microcontroller.

The system is fully controlled by the 8051 microcontroller which has a 4Kbytes of ROM for the program memory. The system has a Keypad by which the password can be entered through it. Here microcontroller plays a major role of taking decision for opening the door. Here a predefined password is stored in microcontroller. Microcontroller takes password inputs form keypad, if the password is matched with the stored password the DC geared motor is operated to unlatch the solenoid-operated lock so that the locker door can be opened. It will be displayed on LCD. When we enter the wrong password through keypad then a massage on the LCD stating “Invalid key” will be displayed on LCD and buzzer will turn ON.

This project uses regulated 5V, 500mA power supply. Unregulated 12V DC is used for relay. 7805 three terminal voltage regulator is used for voltage regulation. Full wave bridge rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

# TECHNICAL SPECIFICATIONS:

**HARDWARE:**

Micro controller : AT89x series

Crystal : 11.0592 MHz

LCD : HD44780

Keypad

Buzzer

L293D

DC gear motor

Power supply

Transformer : 12V step down

Filter : 1000uf/25V

Voltage Regulator : 7805, 7812

**SOFTWARE:**

Keil IDE

UC flash

Proteus

**APPLICATIONS**

* Banks
* House Hold Applications

**BLOCK DIAGRAM:**

16X2 LCD

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Power Supply

DC gear Motor

L293D

Keypad

Buzzer

**POWER SUPPLY BLOCKDIAGRAM:**

Step down Transformer

Filter

Regulator

Output

Bridge Rectifier