

SMART FINGERPRINT DOOR LOCK

OBJECTIVES

Its an open straight-forward system which works basically for house security.

- ▶ Whenever the fingerprint sensor is checked, it will check and match and open the lock. If it does not match the respective error will be displayed to the person.
- ▶ Whenever the keys are pressed, they are matched with the keys already stored. If the keys that are pressed match the initial password stored in the EEPROM which is '1234', then the lock will open up. If the password does not match, then it will print "access denied" on the LCD.
- ▶ If the '#' key will be pressed, it will ask you to enter the current password and if it matches, then it will ask you to enter the new password and the password will be changed.
- ▶ For this implementation, Arduino IDE is used.

ABSTRACT

Security is the serious issue looked by everybody when we are far from our family unit. In the present situation acceptable answer for the above issue isn't yet found. Introduced here is an electronic securing framework which Arduino assumes the job of the preparing unit. Arduino which is a microcontroller board has a place. Fingerprint door lock system is designed for advanced security in houses. Nowadays, every part of the house is turning smart and many people are adopting to the new procedures and technologies. To bridge between traditional and smart models, we are implementing this door lock system which will help in more security for the house.

BENEFITS

- ❖ Security : Fingerprints are much harder to fake, they also change very little over a lifetime, so the data remains current for much longer than photos and passwords.
- ❖ Control : In a company building, you can control and restrict who goes into what part of the building.
- ❖ Ease of use - No more struggling to remember your last password or being locked out due to leaving your photo ID at home. Your fingerprints are always with you.
- ❖ Non-transferable - Fingerprints are non-transferrable, ruling out the sharing of passwords or 'clocking in' on behalf of another colleague. This allows for more accurate tracking of workforce and provides additional security against the theft of sensitive materials.