

# Smart Lock Device

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**Abstract:** *This Project includes smart lock enhanced with biometric which includes fingerprint as well as voice recognition system. This Device will have its own dedicated app and website. For implementing this project, we will be using a fingerprint sensor, microcontroller, microphone, Gsm Module, Motors and necessary hardware components. Smart Lock will not be only restricted to main door locking system but also have other models which will be suitable to lock doors, cabinets, wardrobe(sliding, openable) and also aldrop!. The lock will be designed according to known hardware synopsis. The purpose of introducing this smart lock is to give more security to the user which will not bound only to specific doors. Smart Lock Device will have integrated fingerprint sensor with mic. The purpose of introducing microphone with fingerprint sensor is to ensure more security to the user. Fingerprint Sensor will be associated with number of invalid fingerprint attempts. The software system of this lock device will be designed in such a way that user has to sign-up initially with their contact number as well as email id. Once the user has logged-in successfully they'll have to pair their Smart Lock Device with their phone. If Someone has exhausted number of Invalid fingerprint trials. The user will immediately receive notification that someone is trying to Breach The lock System with an option if they want to enhance security, if user allows that option, the lock will immediately turn on voice recognition and will unlock only when user Speaks as well as Place Finger on the sensor. The Purpose of Collecting Contact Number & mail id is when user is offline, user will receive a text message on their given phone number as well as on given mail id. In Software update, we can introduce the feature of adding contact info of neighbors as well, so that neighbors can also receive pop-up notification, if user wishes to inform them. Keywords- Biometric, Lock, Breach, Security, Voice..*

**Keywords:** smart lock

