

## Voice Control Lock

**ABSTRACT :** Our goal is to create such a lock which will be controlled by our voice. For the project we will use voice recognition system, where we will learn about audio processing system. It can be used in following purposes:

- it can improve the security systems of various places where it is feasible
- it takes technology to a new step where it can be accessible to common homes for door locks
- it can be used in buses and trains to avoid cheating and malpractice of ticket scam

The arrangement of the project can be described very easily. Where the locks will be attached to the voice recognition system which we will get a chance to learn about and then we will have a microphone or something synonymous to receive audio signals. We can interpret magnets in the locks when we need to close it.

## IMPLEMENTATION

When setting up the system, we will only face a challenge while setting up the voice recognition system or integrate with a mobile app with use of zigby or other Bluetooth device . Sound processing will be done mainly with the use of matlab or java in case android app is not built .The research what we have done till now the setup seems feasible

## TIMELINE

Week 1 : set up the locks and basic setup of servo motors

Week 2 : with the basic hardware requirements we will finalise the hardware setup of the project and proper functioning and programming of servo motors in atmel(mostly).Also use of pin jack system for proper opening of door and its closing so that lock is properly closed

Week 3 : then we will have the only task of incorporating the audio processing of audio sensors into the setup and then we will also try recognition for the different people. Our basic aim will be word recognition but we will also try to learn to distinguish different voices of different people. Use if android studio to make easy lock android app and integrate with voice recognition if possible

Week 4 : we will try to expand the range of the system. We plan to implement on number of words or sentences depending on the time available

**COMPONENTS** we have not researched it completely but the things we have researched we are convinced with the feasibility of the components. We think the above components can be purchased within 5000.

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