

# Fabrication & Prototyping

Project idea

# Connected door lock

- Authentication on server that connect to lock/unlock a door
- Oriented on the door/physical side

# Some precedent

- [Arduino Auto-Locking door](#)
- [Home automation using Keypad](#)
- [Arduino based Auto Door unlock control system by Android mobile through Bluetooth and Wi-Fi](#)

# Technical challenges

- Manual override (security)
- State - option (door open/close, lock on/off, day/time, ...)

# Potential technology candidates

- Arduino
- MQTT with server
- Motor + 3D printing for the lock
- Light or contact sensor

# Project decomposition in milestones

1. Detecting door state
  - a. Door position
  - b. Lock position
2. Motorised lock
  - a. Opening and closing
3. Manual override
  - a. Normal exit
  - b. In case of emergency