

LOCKED & LOADED

Aggressive Home Defense

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Project Overview

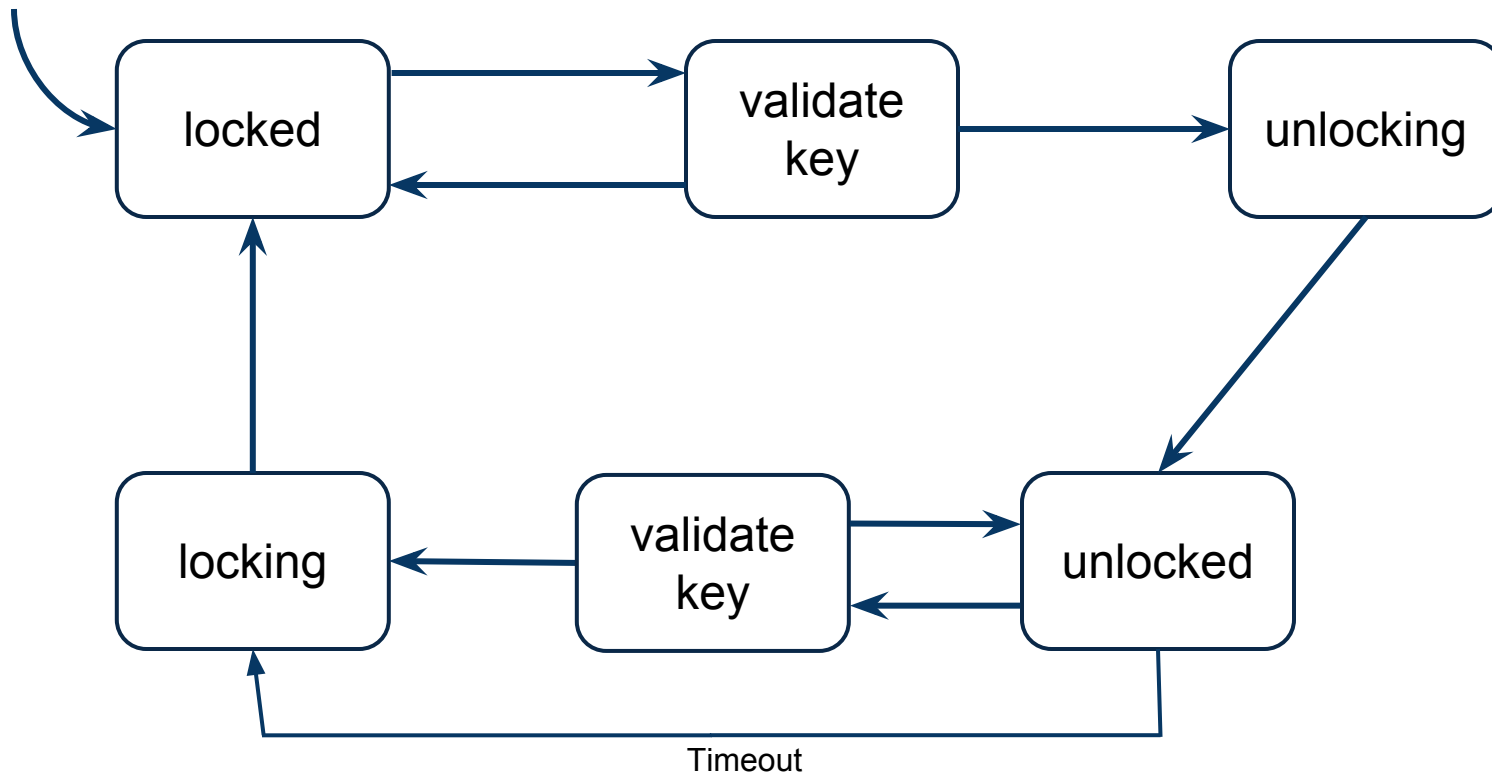
- ❑ A preventative smart lock
- ❑ Unlocks via Bluetooth
- ❑ Retaliation with Nerf gun on intrusion attempt

FSM

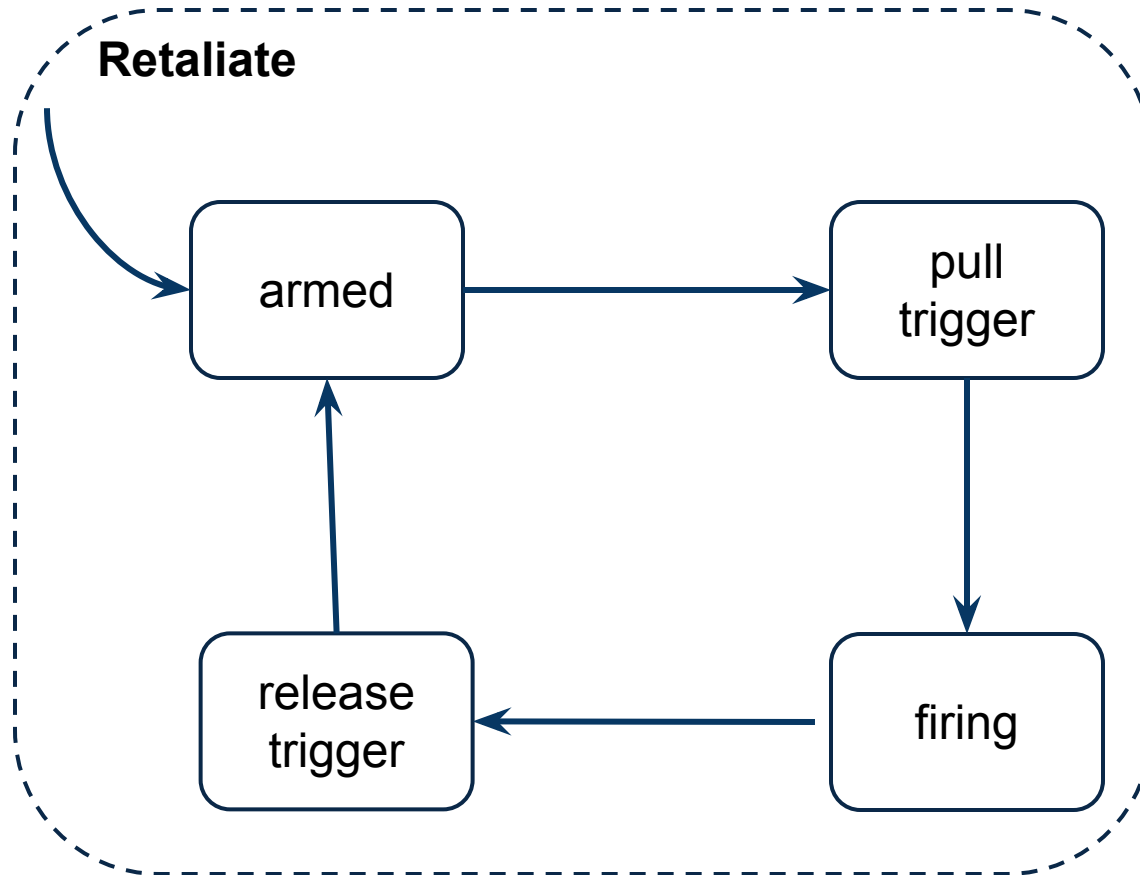


FSM

Lock/Unlock



FSM



Hardware Components

- ❑ Arduino Uno
- ❑ Nexus 7
- ❑ Servo
- ❑ BlueSMiRF Bluetooth Module
- ❑ TSOP38238 IR Receiver
- ❑ IR204-A IR Transmitter
- ❑ Adafruit 9-DOF IMU
- ❑ Nerf N-Strike Elite Rapidstrike CS-18 Blaster

Demo!

- ❑ Unlock using Nexus 7
- ❑ Unlock and lock without timeout
- ❑ Attempt to use invalid password
- ❑ Shake lock without IR being tripped
- ❑ Shake lock with IR being tripped