



Team Protectors Pocket Lockup

Team#
15_2

Problem Statement

To Design and build a Smart lock which works automatically works with the help of user interface. It should take approximately 4 sec to lock and can be locked/unlocked at a maximum distance of 10 meters. It should also warn to owner in case of unauthorized entry and should also contain the history of who all checked in to the home.

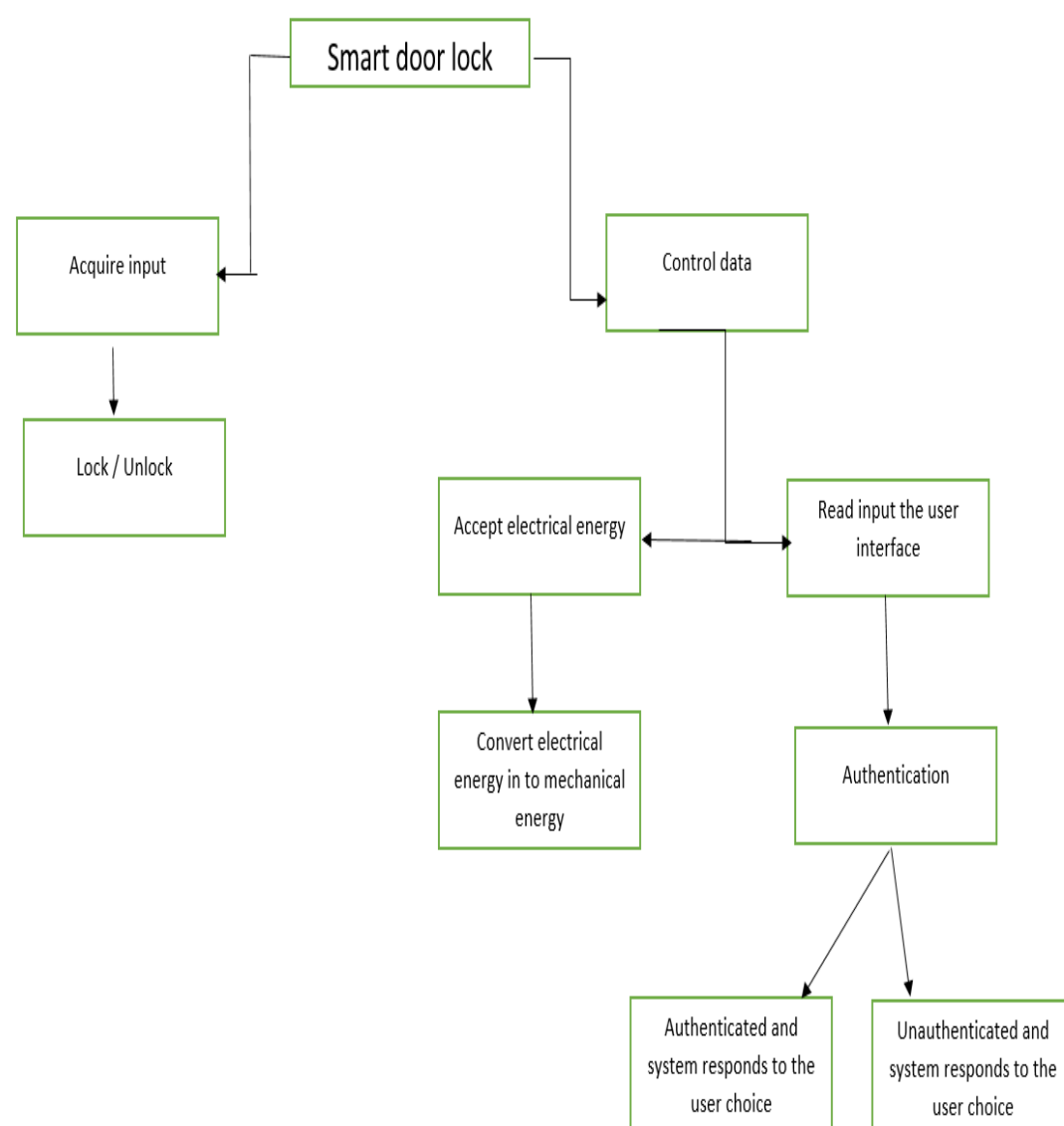
Features

- It can be accessed by multiple trusted users.
- Can be operated from anywhere.
- Stores the information of the users accessed and displays the same to the admin.

Project Overview

- Pocket Lockup operates fully automatic with the help of a mobile App.
- Multiple users are able to able to access.
- Pocket Lockup uses IoT interface which has enabled it to be operated from any corner of the world.
- Response time is usually 5 seconds.

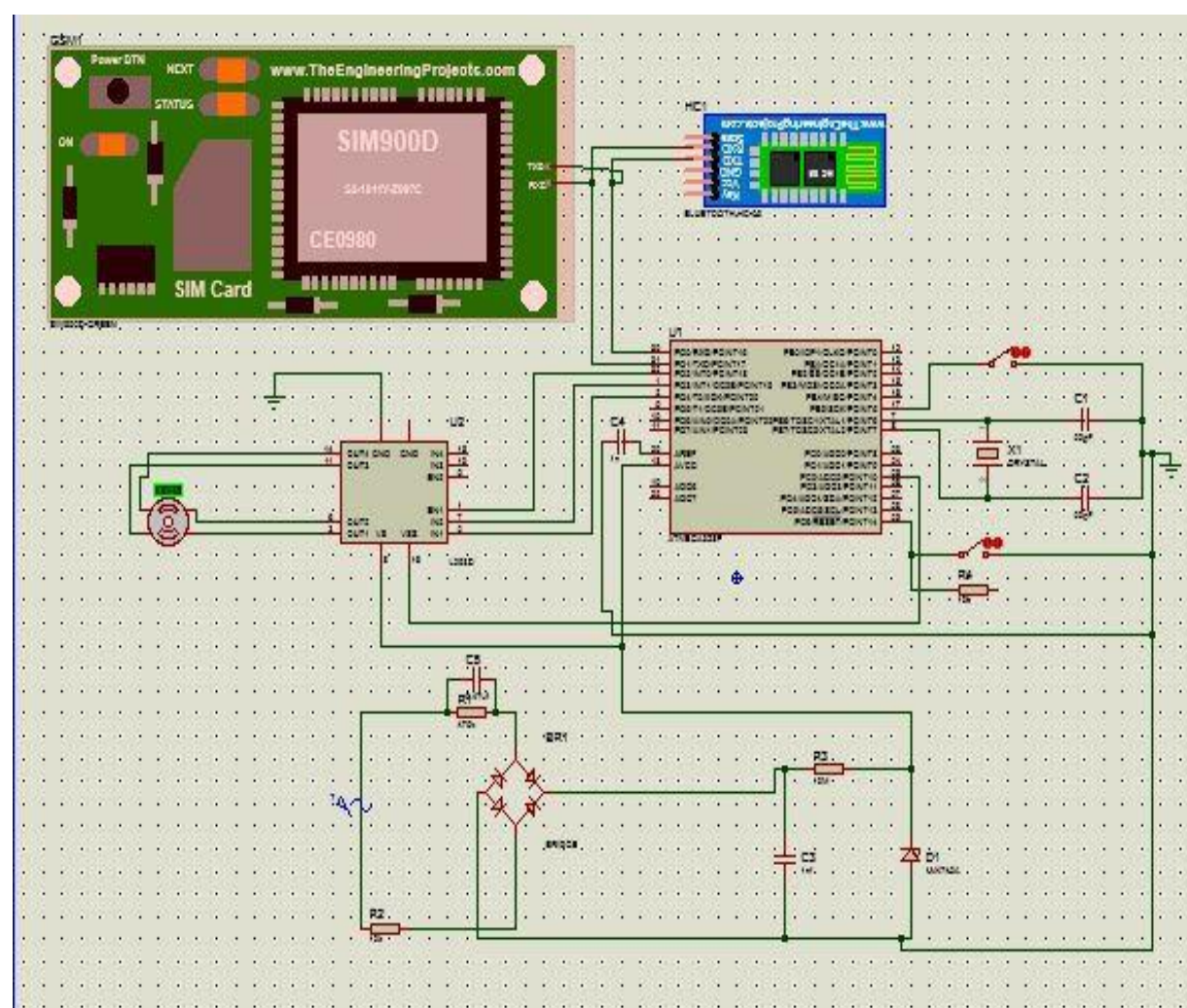
Product Architecture



Specifications

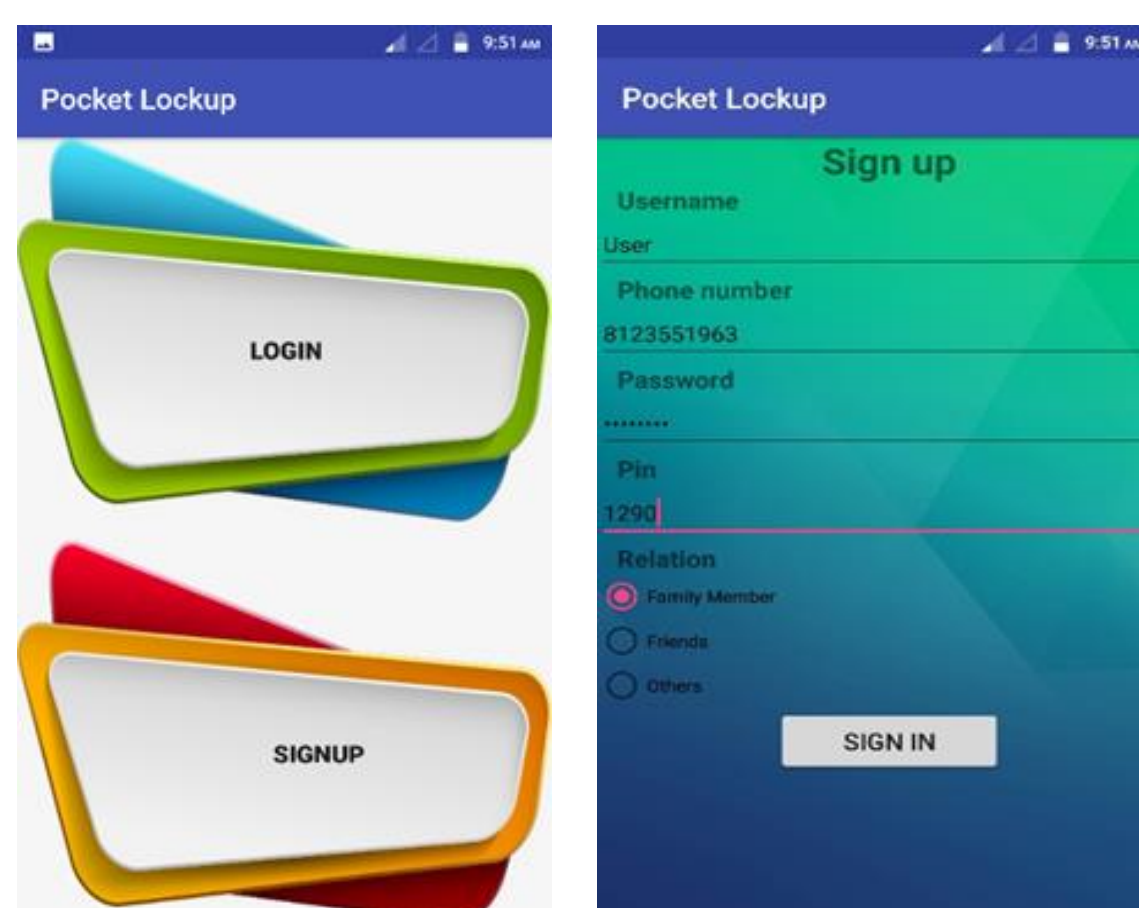
Mechanical	Electrical
Dimension: 11cm X7cm X 11cm	Crystal oscillator : 16MHz
Material: Aluminium	Micro-controller: Atmega 328p
Thickness :1.2mm	Wi-Fi module: ESP8266-ES12
Actuator: Servo motor	2 Resistors of 10k ohm and 1k ohm.
Torque :10kg	2 Capacitors of 22pF & 1capacitor of 100mF
Latch: Mild steel of 10mm diameter.	1 regulator IC(7805) of 5V
Coupler consisting of 6-8mm diameter	Battery 12V,1.3A
6 nuts &bolts of 2 mm	1 Bridge rectifier

Circuit Diagram

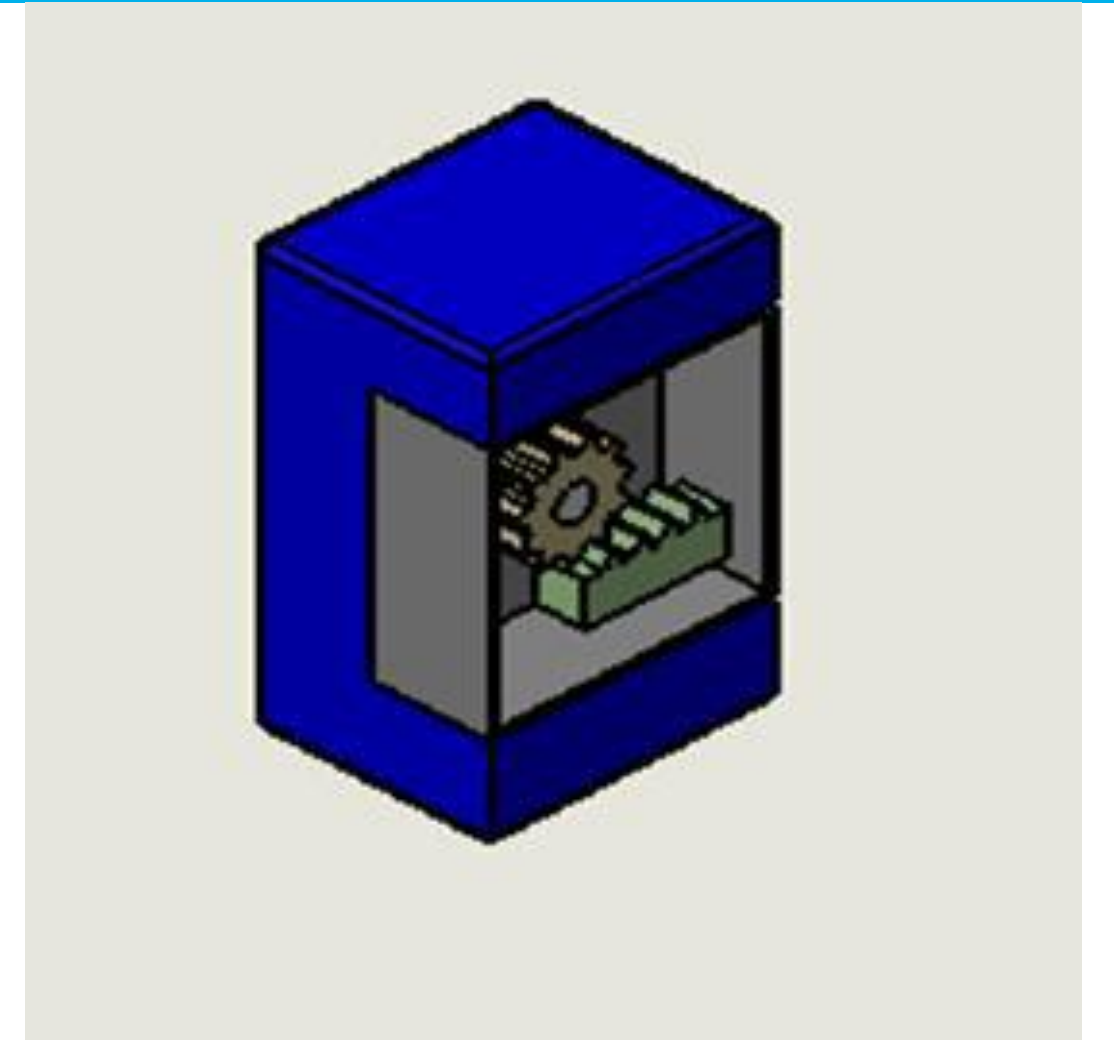


IoT

Pocket Lockup uses IoT interface which has enabled it to be operated from any corner of the world.



3D Model



Prototype

Insert picture 1 here



Team

ME

- Vinayak S Naik
- Prajwal

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Scan the QR code for Demo,
Videos, more info. And
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