

# 1. System

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## 1.1 User Chooses Between two options

- Open APP and see two options Maglock or Intercon

Functional requirement 1

## 1.2 Maglock Connection

- Run tests 2.3, 2.7 and 3.1

Functional requirement 2

## 1.3 Intercon connection

- Run tests 2.7 and 3.2

Functional requirement 3

## 1.4 User exits the room

- .Run tests 2.3 and 3.3

Functional requirement 4

# 2. Computer

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## 2.1 Registration system

- through interface system the administrator can be able to remove, to add and to make modifies about the users

Computer Requirement 1.i

## 2.2 DataBase

- through the VNC viewer with link “marcosh72.ddns.net:” user “pi” password “bezerra123” the administrator can be able to do “test 2.1”

Computer Requirement 1.ii

## **2.3 reports regarding the users**

- The computer need save all data of access (how is in the room, hour user in, hour user out)

Computer Requirement 1.iii

## **2.4 Wifi module**

- Run test 3.2

Computer Requirement 1.iv System Requirement 3

## **2.4 Bluetooth module**

- Run test 3.1

Computer Requirement 1.v System Requirement 2

## **2.5 Door Unlock**

- To test the door unlock, the executor will send unlock command to the Maglock board through wifi to nodeMCU module.

Computer Requirement 1.vi

## **2.7 APP communication**

- The board will communicate with the app between a Bluetooth Channel to maglock.
- The board will communicate with the app between a WIFI Channel to intercon.

Computer Requirement 1.vii

## 2.8 Web page

- the computer will update a webpage always, showing the people there are in the room

Computer Requirement 1.viii

## 3. APP

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### 3.1 “Access” option is chosen

- Connect automatically through bluetooth with the computer when the application is selected.

APP requirement 1.i System Requirement 2

- Sends the unlock request to the computer.

APP requirement 1.ii System Requirement 2

- Receive a feedback from the computer, and turn off the bluetooth

APP requirement 1.iii System Requirement 2

### 3.2 “Intercom” option is chosen

- A scan QRcode is running.

APP requirement 2.i System Requirement 3

- The connection between computer is started through Wifi, and the app receive access for list of people there are in the room

APP requirement 2.ii System Requirement 3

### 3.2 “Exit” option is chosen

- A request is sent from the app to the computer, telling that the user is leaving the room.
- Run test 2.3 and 2.5

APP requirement 3.i System Requirement 4

## **4. Maglock**

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### **4.1 Communication with Computer**

- Run test 2.5

System requirement 2 and 4