## Class Diagram

Diagram

Description automatically generated

## Hardware Specification

Schematic of hardware : The T GPIO extension board used is coloured differently and indicates GPIO rather then # before the numbers. MFRC 522 RFID was selected due to it being available in a kit that I already had access to and having provided code.

Chart, histogram

Description automatically generated

## Test Plan 2 a

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test ID | Test Name/Description | Test Setup | Expected Results | Actual results fill later |
| 1 | Green RGB LED functions | Have breadboard set up | Green is shown on LED |  |
| 2 | Red RGB LED functions | Have breadboard set up | Red is shown on LED |  |
| 3 | Green RGB LED can change to red | Have breadboard set up | Initially green is shown on LED which then changes to red |  |
| 4 | Red RGB LED can change to green | Have breadboard set up | Initially red is shown on LED which then changes to green |  |
| 5 | MFRC 522 RFID Module activates | Have breadboard set up. Have a passive tag ready to wave in front | Pi prints out data on RFID tag |  |
| 6 | MFRC 522 RFID Module can note separate ID | Have breadboard set up. Have two passive tags ready to wave in front | Pi prints out different data for each RFID tag swiped in front. |  |
| 7 | MFRC 5222 RFID Module will not read when RGB LED is red | Have breadboard set up. Have a passive tag ready to wave in front | RGB LED is red and no data is printed out by the Pi. |  |

##  flow chart for door interface

A picture containing diagram

Description automatically generated

##  flow chart for server:door messaging

Diagram

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