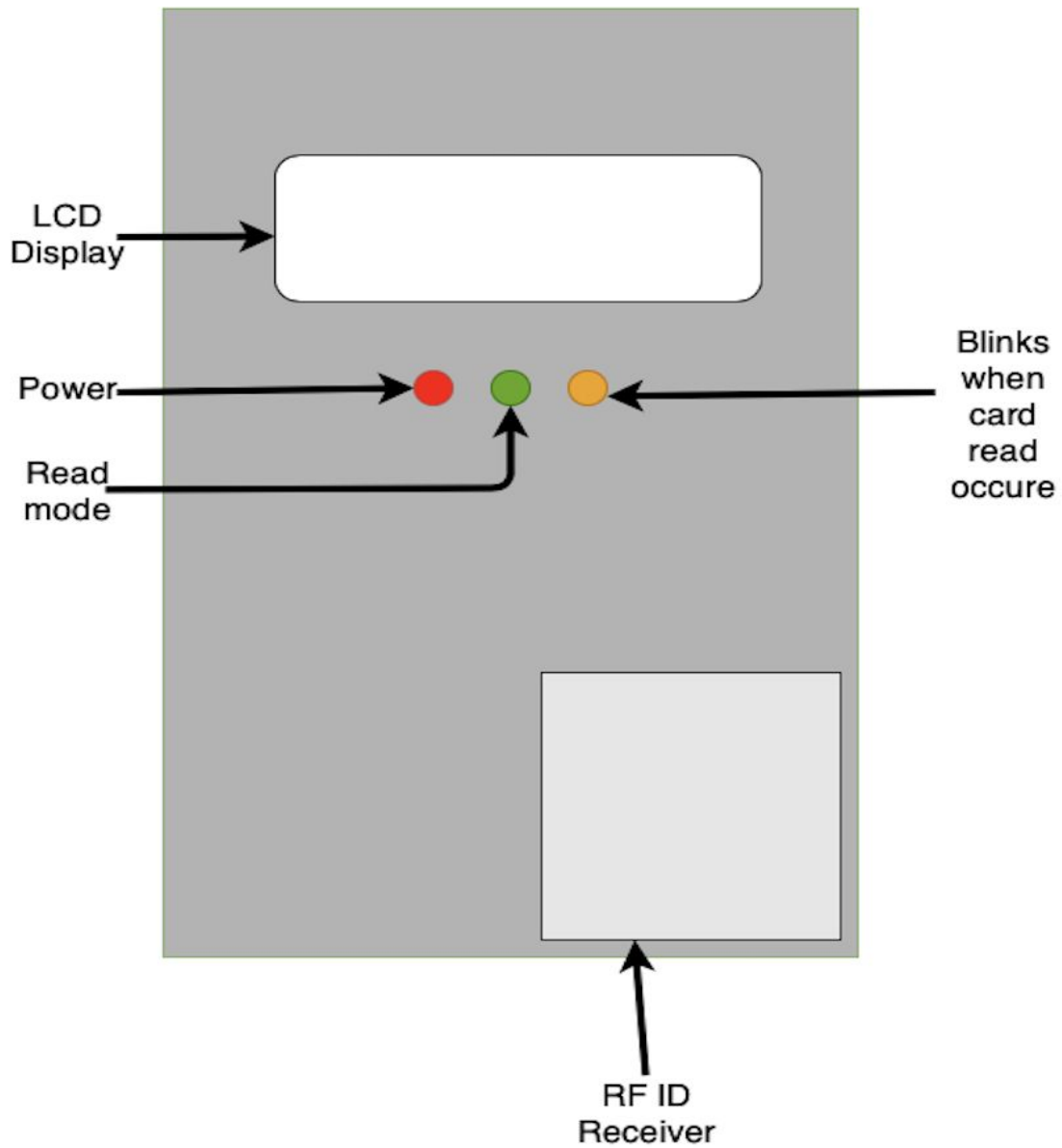


HCI policies and human factors

- Kept the distance between the RFID reader and the RFID card to a minimum to get a better reception.
 - Visible clues on the where the rfid receiver antenna.
- Visual clues and audible reactions for card read and write tasks by the device.
 - All the switches are labels for easy identification.
 - Power on
 - Red LED and beep codes
 - Task read/write
 - LED blinking patterns and appropriate beep codes for task success.
 - LED blinking and appropriate beep sound for task failure
 - Read/Write mode selection
 - LED still for read mode patterns and beep codes
- Privacy about personal data
 - Encrypt and store the personal data in the database
 - Encrypt and store the personal data in the RFID card
 - Use a session key for authentication with the server rather than the real key.
- RFID card type
 - Passive Mifare classic card is used
 - Low cost when replacing the lost/damaged RFID card
 - Easy to carry in the pocket.
- Textual guidance for operating the device
 - Step by step instructions are displayed on the LCD display for easy of use.
 - All maintaining control switches are on the back to give a clean front UI.
- The simple UI design of the device
 - The user only has to bring the card near to the device.

- LED lights to notify the mode of the device
- Device operator can simply switch between the read and write mode by sliding the button
- Different LED lighting patterns and beep codes are used to notify whether the task was successful or not.
- The operator can simply update the data on an RFID card remotely by inserting the necessary data to the computer and inserting the card into the device.
- Power sources
 - Can operate from multiple power sources battery and wall current.
- Mounting to wall
 - Can be easily mountable to the wall with a wall mount.
 - Flush finish due to control switches are on the back of the device..
- Connectivity to server
 - Have multiple connectivity to the server for reliability
 - Have both wired and wireless connections.
 - External antenna for better reception.
- Electrical safety precautions
 - Device is battery powered and wirelessly connect to the servers lower the risk on electrical surge etc.
 - Only have to plugged the device to the wall when the battery is running low.

Front of the device



Back of the device

