1. Development of the Fare Collection Device
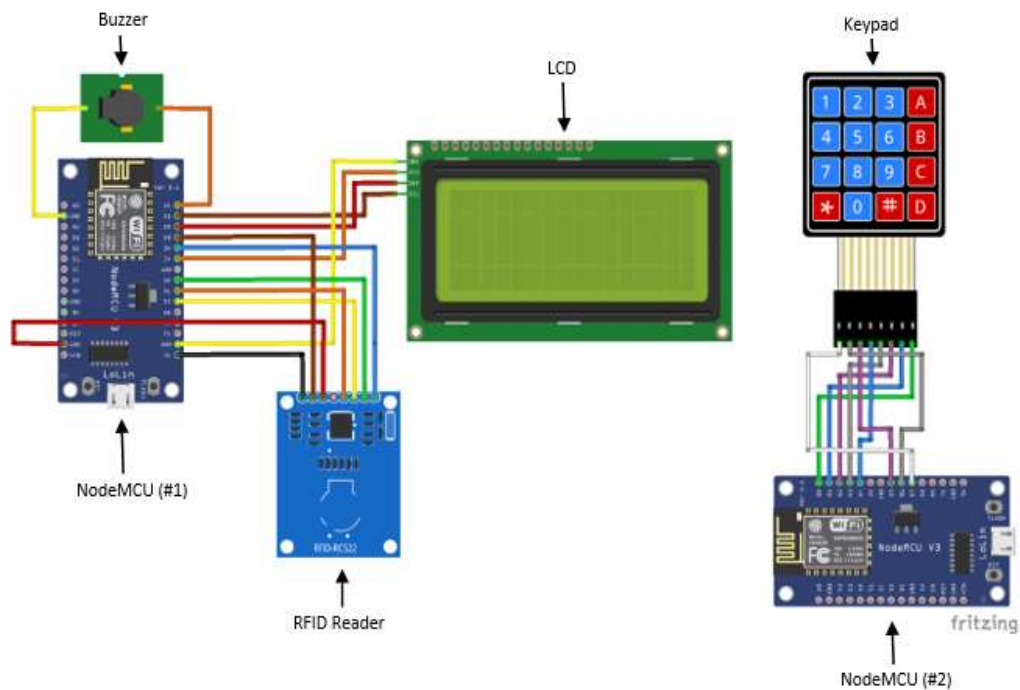

Figure 1. Circuit Diagram of the Fare Collection Device

These are the steps involved in assembling the device.

1. For the connection of the RFID scanner to the first microcontroller, connect the SDA to pin D4, the SCK to pin D5, the MOSIMI to pin D7, the SOI to pin D6, the GND to pin G, the RST to pin D3 and 3.3v to pin 3v.

2. For the connection of the LCD to the first microcontroller, connect the GND to pin G, the VCC to 3v, the SDA to pin D2, and SCL to pin D1.

3. For the connection of the buzzer to the first microcontroller, connect the first pin to the D0 and the second pin to G.

4. For the connection of the Keypad to the second microcontroller, connect the 8 corresponding pins of the Keypad to the pins D0, D1, D2, D3, D4, D5, D6, and D7 of the second microcontroller.
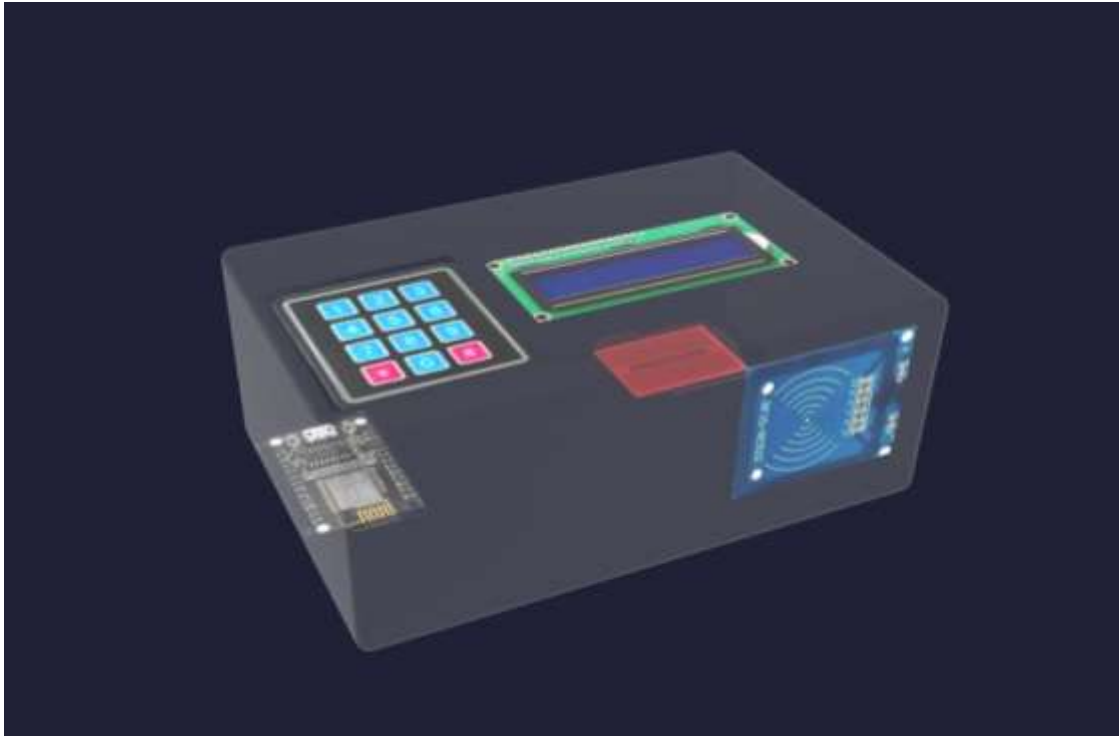

Figure 2. Design of the Prototype of Fare Collection Device

Figure 3. Actual Prototype of Fare Collection Device