RFID BASED AUTOMATED FILLING STATION

PROJECT ON PERIPHERAL AND INTERFACING LABORATORY

COURSE NO : CSE-3104

CONDUCTED UNDER THE SUPERVISION OF

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MOTIVATION

In the era of modern technology most of the filling stations i.e gas filling stations, petrol pumps or other business like these keep a staff to interact with the customers.

Again the there is no second choice when the customer is out of cash although he has a credit card and balance in it.

So it is high time to build an automated filling station system based on credit card to save the time and efforts.

INTRODUCTION

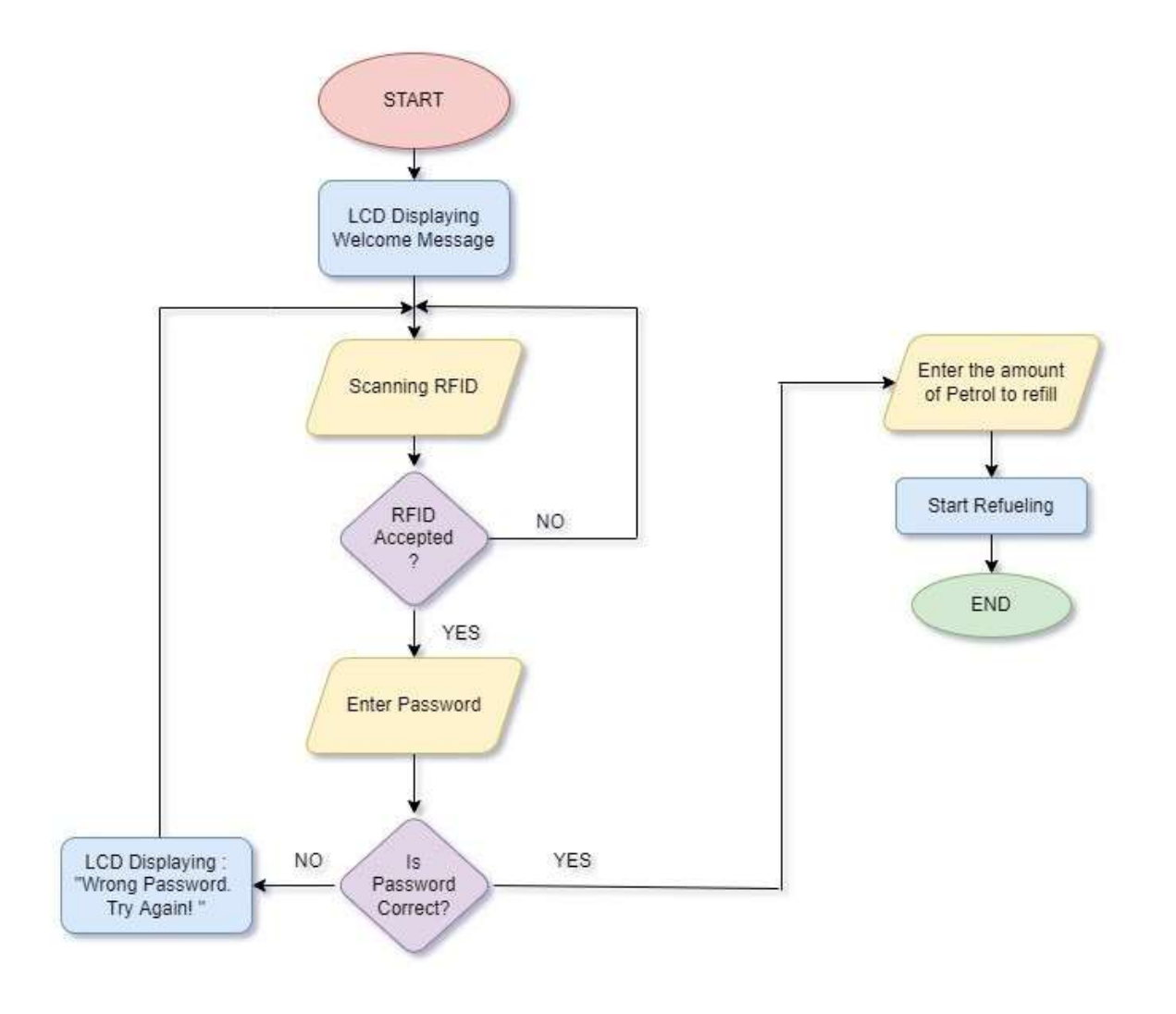
In this project, we designed a RFID based petrol pump where the customers can request for fuel just by :

scanning their RFID

giving password and

amount of fuel they want.

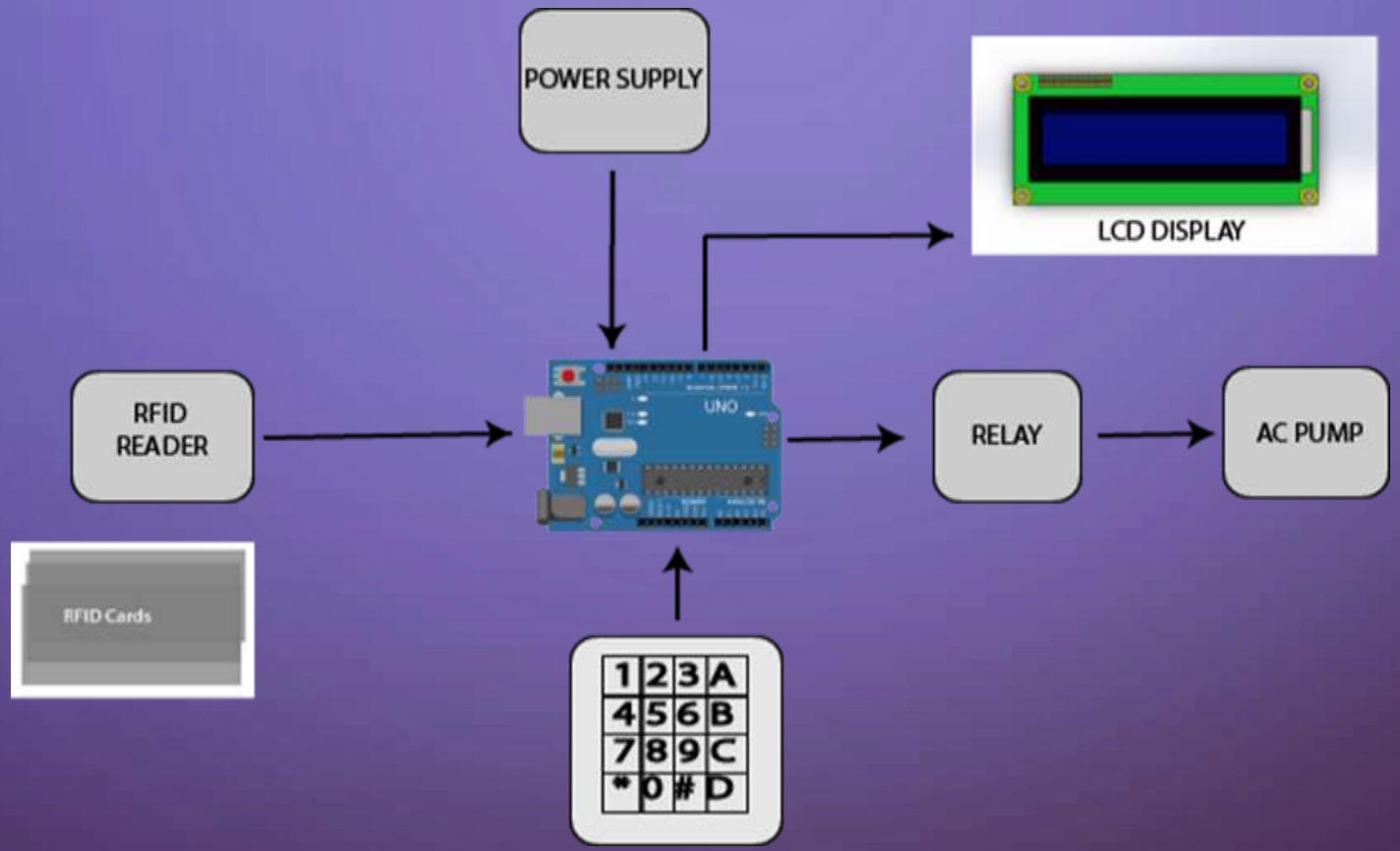
FLOW CHART


START
LCD Displaying Welcome Message
Scanning RFID
RFID Accepted ?
NO
YES
Enter Password
Is Password Correct?
NO
LCD Displaying : "Wrong Password. Try Again! "
YES
Enter the amount of Petrol to refill
Start Refueling
END

COMPONENT LIST

Serial No	Product Name	Quantity
1	16x2 LCD Display	01
2	I2C LCD ADAPTER	01
3	ARDUINO UNO	01
4	MATRIX KEYPAD (4 X 4)	01
5	RFID MODULE	01
6	AC SUBMERSIBLE PUMP	01
7	RELAY	01
8	OIL TANK	01
9	BREADBOARD	01
10	CONNECTING WIRE	As required

COMPONENT BLOCK DIAGRAM



ASSEMBLY AND ORIENTATION

SLIDING RFID CARD

ENTER PASSWORD

ENTER AMOUNT AND START FILLING

FILLING DONE!!!

CONCLUSION

- The above-mentioned model proposes to remove all the shortcomings of the manually operated petrol pumps by replacing them with automated ones. With this simple technology in use, any person can easily access for fuel at Fuel Stations. Apart from this all, these systems are less time consuming compared to the traditional ones

THANK YOU