



INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact factor: 4.295

(Volume 5, Issue 3)

Available online at: www.ijariit.com

Smart restaurant system

Kousar Jan

aburazin69@gmail.com

Beehive College of Engineering and
Technology, Dehradun, Uttarakhand

Insha Farooq Talib

inshafarooq1111@gmail.com

Beehive College of Engineering and
Technology, Dehradun, Uttarakhand

Biswash Pathak

biswashpathak1@gmail.com

Beehive College of Engineering and
Technology, Dehradun, Uttarakhand

Sunil Kumar Sah

skhimal7424@gmail.com

Beehive College of Engineering and
Technology, Dehradun, Uttarakhand

Muzzamil Rather

rathermuzzamil25@gmail.com

Beehive College of Engineering and
Technology, Dehradun, Uttarakhand

ABSTRACT

The main aim of our project is to provide an AUTOMATION in the restaurants by replacing the TRADITIONAL RESTAURANTS in which the customers have to wait for a longer time to give their orders to the waiters and there may also be a mistake while taking and delivering food items to the customers. There is also a lot of work on waiters when massive people are present in the restaurant, especially during festival occasions. If we provide automation in a restaurant system we can overcome these drawbacks and lead to a SMART CITY which is also the aim of our government.

Keywords— Automation, IoT, Ordering and Delivering

1. INTRODUCTION

A country is said to be developed when the standard of living in that country improved. We can improve our lifestyle by using automation in each and every sector. By using the technology we can reduce the efforts of the people. Now a day IOT is a popular technology which enables us to exchange information through the internet. By using IOT we can replace the traditional method of taking orders using the paper pen as in traditional restaurant system. In IOT based smart restaurant as the customer enters the restaurant, the door will open automatically. The customer can sit anywhere in the restaurant and they can select the items from display provided at each and every table. The corresponding food item will be displayed on the kitchen side which is on the site of chefs. The restaurant authority will notify the customer how much time it will take to get their food ready for delivery. As the food is prepared, the members in the kitchen will place the food item on the conveyor belt and will stop at the corresponding table.

2. COMPONENTS

2.1 Arduino Uno

It is an open source electronics platform based on easy to use hardware and software. Arduino boards are able to read inputs-light on a sensor, a finger on a button or a Twitter message and turn it into an output activating a motor turning ON an led, publishing something online.



Fig. 1: Arduino Uno

2.2 Liquid Crystal Display

LCD is a flat panel display, an electronic visual display that uses the light modulating properties of liquid crystals.



Fig. 2: Liquid Crystal Display

2.3 Keypad

Keypad 4*4 is used for loading numerics into the microcontroller.

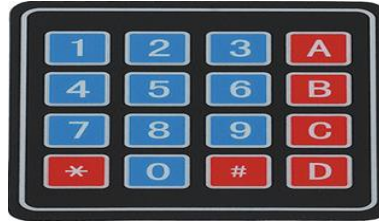


Fig. 3: Keypad

2.4 RFID

RFID is an acronym for “Radio-Frequency Identification” and refers to a technology whereby digital data encoded in RFID tags or smart labels are captured by a reader via radio waves.



Fig. 4: RFID

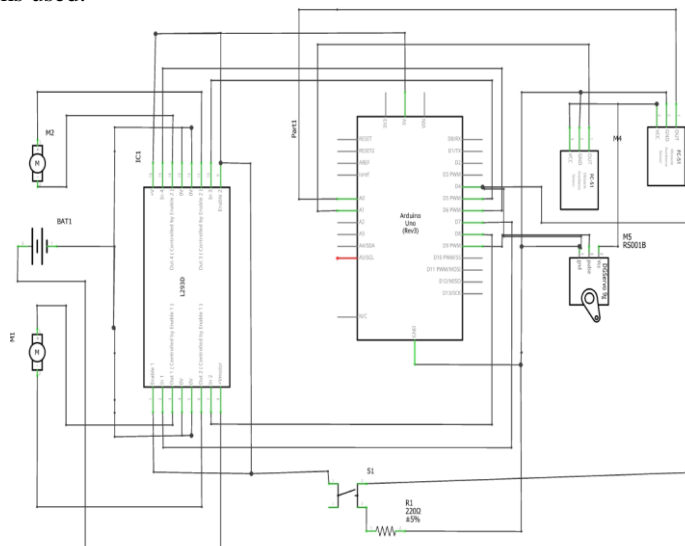
2.5 IR Sensor: Infrared sensor is an electronic device that emits in order to sense some aspects of the surroundings.



Fig. 5: IP sensor

3. CIRCUIT DIAGRAM

Following are the circuit diagrams used.



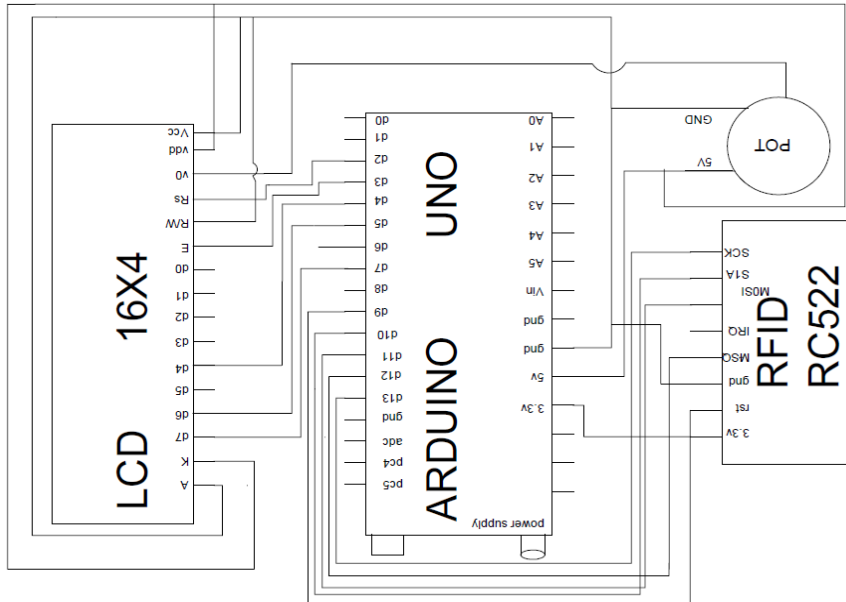


Fig. 6: Circuit diagrams

4. PROPOSED SYSTEM

Following are the images of our proposed system.



Fig. 6: Final hardware

5. FURTHER ENHANCEMENTS

The touchscreen can be used as an input device in place of the keypad which is user-friendly. A number of tables can be extended.

6. REFERENCES

- [1] "Automated food ordering system", International Journal of advanced Research in Computer science and Software Engineering, ijarcsse February 2013.
- [2] "Touch screen based menu ordering & displaying system for restaurants". IJCET. Vol.3, pp. 297-307, July./Sept.2012.
- [3] J.Mustafa, R.Kothari, R.Naik, and A.Slatewala," Touch & Dine A Multi-Touchable Restaurant System," in UACEE International Journal of Computer Science and its Applications-Volume 1: Issue 1 [ISSN 2250- 3750].
- [4] J. Purnama, et al."Application of Order Management System in Restaurants", Seminar Nasional Aplikasi Teknologi Informasi 2007, Yogyakarta, 16 June 2007 (SNATI 2007) ISSN: 1907-5022.
- [5] N. A. Samsudin et al., "Customizable Wireless Food ordering System with Real time customer feed-back ".2011 IEEE Symposium on Wireless Technology & applications(ISWTA), September 25-28,2011, Langkawi Malaysia