JCRT.ORG

ISSN: 2320-2882



INTERNATIONAL JOURNAL OF CREATIVE **RESEARCH THOUGHTS (IJCRT)**

An International Open Access, Peer-reviewed, Refereed Journal

CANTEEN AUTOMATION SYSTEM

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Abstract: The Canteen Automation System is an application for a manual canteen work. This application will help the canteen workers to get an idea about the orders of that particular day. It will also help to avoid confusion between the orders as they will be placed digitally. We need an application like this to manage this vast, unorganized crowd. Users will be able to place the orders digitally. Customers will be happy after using this application as it is very easy to use and also time saving.

Index Terms - Flutter, Firebase, Android studio, Canteen.

I. INTRODUCTION

When we go to the canteen for lunch, there is usually a long queue waiting to place an order and several people are waiting for their food to be delivered. It is very hectic and time consuming when you order your food standing in a queue for a long time. The goal of this app is to reduce the amount of time it takes to order food and have it delivered. Faculty and students will use our application to get their orders delivered on time. [4] Many canteens have opted to concentrate on easy preparation and fulfilment of orders rather than providing a rich dining experience in today's era of fast food and take-out. Until recently, all of These delivery orders were placed with waiters or over the phone, but this system has many drawbacks, including the annoyance of the customer having a physical copy of the menu, the lack of visual evidence that the order was placed correctly, and the requirement for the canteen to have an employee answering the phone and taking orders.[6] This system also reduces the workload at the canteen since the whole order-taking process is automated. When a customer places an order on the application, it is entered into the database and then retrieved in real time by the administrator on the canteen's end. All products in the order are displayed and easy-to-read manner inside this application, along with their corresponding choices. This helps canteen workers to quickly go through the orders as they come in and deliver the products that are needed with minimal delay and uncertainty.[7]

II. LITERATURE SURVEY

Paper based system:

One of the most widely use methods is paper based method. In this method paper is used for taking the orders, billing orders and storing our documents. However, this framework has some issues.

Those are given below:

- This system's papers are easily lost or damaged.
- Additionally, there is wastage of time and paper.
- Even a minor adjustment necessitates reprinting the entire menu card, as well as a significant amount of human effort and the possibility of human error while taking orders.
 - This system doesn't function properly as it is time consuming from the customer's perspective.[1]

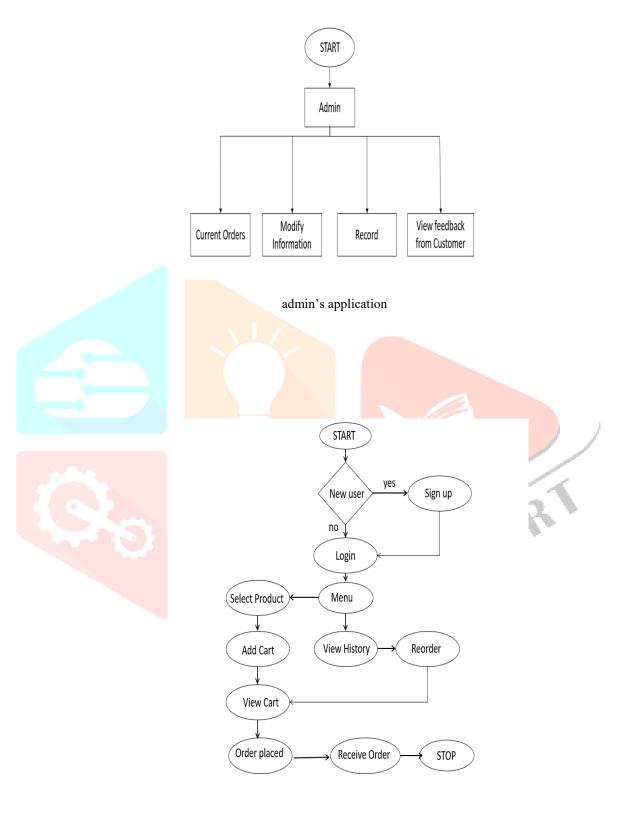
Covid-19 situation:

The current situation prevents us from getting together in order to maintain Social Distance. In this situation, canteen queues, rushes and crowds would be more dangerous.

III. METHODOLOGY

Flow of project

The diagrams below describe the flow of project:



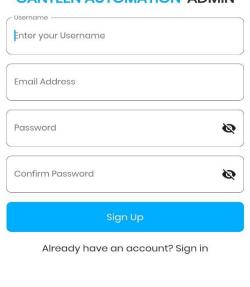
customer's application

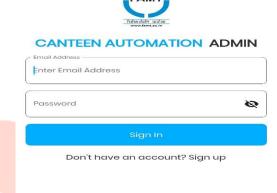
Implementations

Some screenshots of the application are as follows:

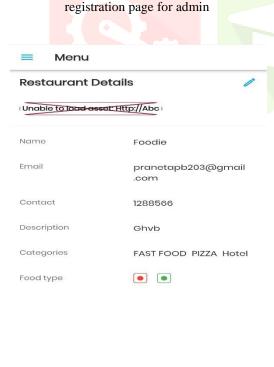


CANTEEN AUTOMATION ADMIN





login page for admin



Praneta
pranetapb203@gmail.com

Dashboard

Order

Menu

1. Canteen Detail
2. Menu Details

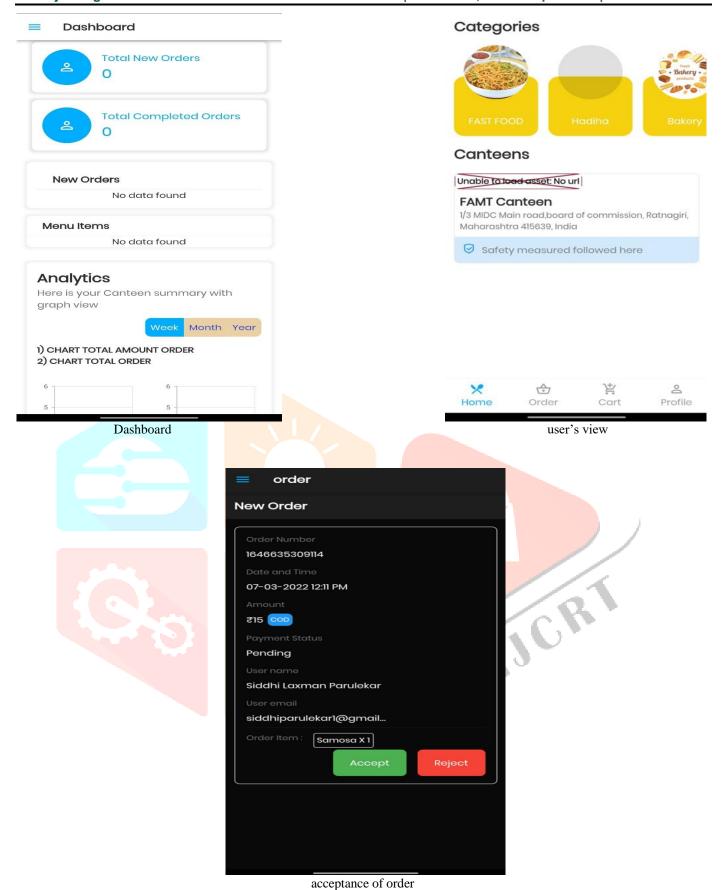
Setting

Logout

vith

admin's profile

menu details settings



III. CONCLUSION

The development of canteen food ordering system involved many phases. The approach used is a top-down one concentrating on what first and steps for moving to successive levels of details. In primary phase, the system is designed at block level. The blocks are created on the basis of analysis done during the problem identification phase. Different blocks are created for different functions emphasis is put on minimizing the information flow between blocks. Thus, the activities which require more interaction are kept in one block. Online orders give us flexibility. Hence with the help of this application we created a system which helps user to deal with digitalization of food ordering system. This system helps to save time, avoid queues and crowd. This system is user friendly as it has a simple GUI (Graphical User Interface).

IV. FUTURE SCOPE

Future scope of this system is vast. This application can also be developed as an iOS application. The future scope in this application will be the improved GUI of this application. This application can also be modified for large restaurants too. Feedback System will be upgraded and preferred food items will be displayed to the customers using machine learning algorithms. So, it has great future and it will help lots in the field of application development.[2]

V. ACKNOWLEDGMENT

The project was successfully completed under the guidance of our Head of Department, Dr. Vinayak A. Bharadi, Project coordinator, Prof. Priyanka Bandagale, and Project Guide Prof. Santosh Jadhav. We would like to thank them for all of their efforts and help which indeed helped us in the completion of the project and gain more knowledge through research and study.

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