#### A

#### MINI PROJECT REPORT

On

# Restaurant inventory management system

# Submitted in partial fulfillment for the completion of BE-III Semester

In

#### INFORMATION TECHNOLOGY

By

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# DEPARTMENT OF INFORMATION TECHNOLOGY CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

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# CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A) DEPARTMENT OF INFORMATION TECHNOLOGY



### **CERTIFICATE**

This is to certify that the project work entitled "RESTAURANT INVENTORY MANAGEMENT SYSTEM" submitted to CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY, in partial fulfillment of the requirements for the award of the completion of 3<sup>rd</sup> semester of B.E in Information Technology, during the academic year 2019-2020, is a record of original work done by Nithin Reddy S (1601177371103), Koushik Reddy G (160118737101) during the period of study in Department of IT, CBIT, HYDERABAD, under our supervision and guidance.

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#### **ABSTRACT**

This project was created to run a restaurant smoothly. This inventory management system is a program which lets the user manage the inventory in the restaurant or home with ease. This will keep a record of the inventory available and will reduce the inventory corresponding to food made. This project is developed by using C++ language.

This project consists of 2 main classes for raw inventory and dishes which are only accessible by the manager of the restaurant or the home-maker. The manager is required to enter the details of various raw inventory and dishes. This program holds the values of required amount of various dishes using a unique integer array for every dish.

This inventory management system allows the user to check the status of any forms of inventory from anywhere across the world. The user can also add in any new dishes and can edit the amount of inventory it takes to create the particular dish.

#### The goals of the system are:

- ✓ Help users update their inventory whenever they go Grocery shopping.
- ✓ To get an overview about the amount of inventory the user has.
- ✓ To help users manage their inventory while making various everyday dishes.

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### 1. Introduction

Eating out can be a very pleasurable experience. Having dinner with a friend, eating a romantic meal while on a date or celebrating some special event with a party at a restaurant are all things we enjoy doing. Even so, there are few people who eat out all the time and eating at home has many points in its favor. It is cheaper to eat at home. It is healthier to eat at home and it is usually much more comfortable.

In recent years, technology has greatly improved and has become a very big factor in our modern society. It has become a platform for highly sophisticated, distributed, enterprise-level applications. We are just a click away from the rest of the world and this is all possible because of the presence of the internet applications that we have on our computer systems. Internet or Webbased applications help by organizing and making these activities on the internet possible

However, internet and web applications are now being used in every step of modern technology where the modern society largely depends on computer technologies. By using the technology, In the present work, an inventory management system has been developed and implemented. The first screen on execution of the programme is presented in Fig 1.1. here, the users have to select their position as a user .

#### 1.1 Motivation

Now a day's people are dependent on technology. They like to do everything in their mobiles. So, If people want to cook themselves any food, they can check the status of their inventory from anywhere in the world, once entered. There is no need to deal with the frustration of going home and realizing that there is not enough inventory to make themselves some food and sleeping without eating anything. Thus the person can check the status of their inventory easily. It is more convenient. Every person these days wants to get his/her work done without wasting the time and energy. So, this inventory management system is very important. A user can easily see if he can make a particular dish by just checking his inventory. This is the motivation behind this project.



Fig. 1.1: Main menu

### 1.2 Objective of the Project

- To develop an inventory management system
- To make inventory management system user friendly.
- To provide the users with most new technology and fastest service, that is secure, convenient and easy
- To make many people familiar with technology
- Facility to generate different reports, which are helpful for the management in item making.

## 2. Existing System

#### 2.1 LIMETRAY

LimeTray provides channel management, digital marketing, ordering and Customer Relationship Management services for food and beverage sector.

LimeTray's headquarters is located in Gurugram, Haryana. LimeTray generates \$26.6K in revenue per employee LimeTray's main competitors are MassBlurb, PetPooja and UrbanPiper. LimeTray has 1,969 followers on Owler. Information of the LimeTray system is presented in table 2.1 and the website of the same is shown in Fig 2.1. With a growing customer base and over 4500 satisfied restaurant chains. This inventory management system makes the recreational time smoother.

**Table 2.1: Information about LIMETRAY** 

Start up Name	LIMETRAY	
Headquarter	Gurugram, Haryana	
Founder	Akhilesh Bali	
Sector	Internet Software	
Founded	2013	
Estimated total revenue	\$4.7M	

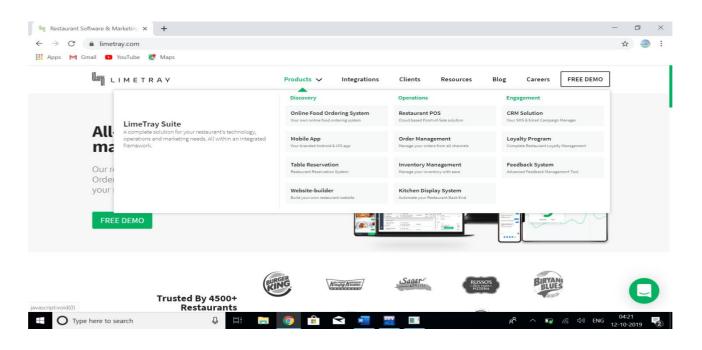


Fig 2.1: LimeTray Website

## 3. Proposed System

#### 3.1 Problem statement

This project is aimed at developing an inventory management system for food. This inventory management system is a mobile based system that can be accessed through out the net and can be accessed by anyone who has a mobile.

#### 3.2 Methodology

The following methodology applied for the developing the program for inventory management system.

- Programming language C++ is used
- Switch statement is used for the selection of various options form the starting screen, selection of the movie and timings User logs into the system and selects the options various options. This is implemented switch statement.

### 3.3 Analysis-plots:



Fig 3.1: Benefits of a Restaurant Inventory management system

U.S. restaurant POS terminal market size, by end user, 2015 - 2025 (USD Billion)

2.71 2.49 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 QSR ■FSR Institutional Others

**Fig 3.2:** Restaurant Point of Sale Terminals Market Size(2019-2025)

Source: www.grandviewresearch.com

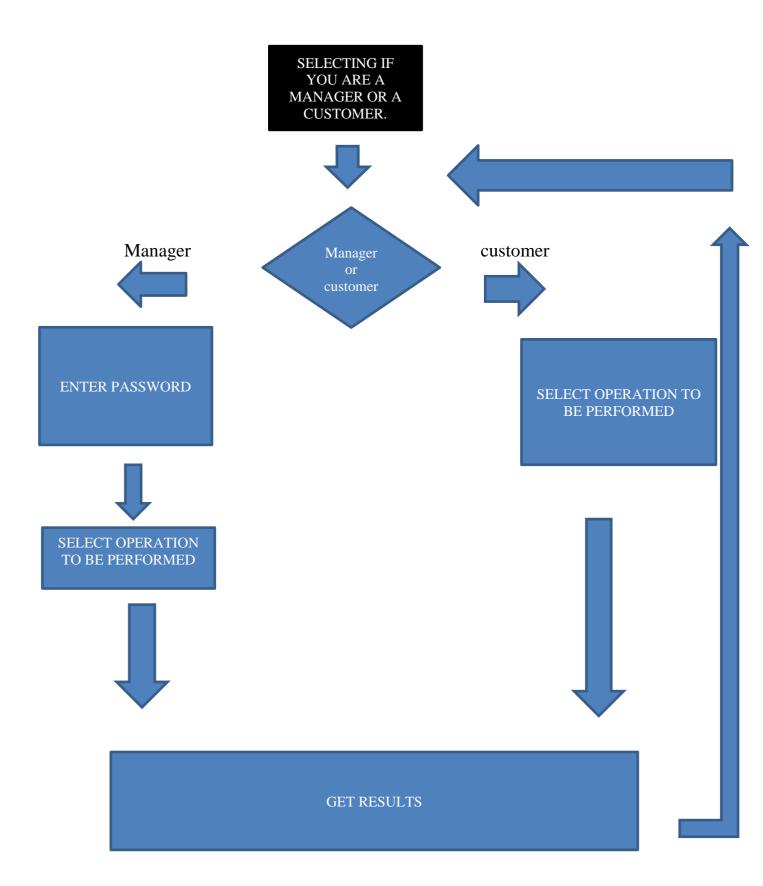


Fig 3.3: Flow chart showing the procedure of execution

## 4. Software and Hardware Requirements

A software requirements specification (SRS) is a description of a software system to be developed. Used appropriately, software requirements specifications can help prevent software project failure. The software requirements specification document lists sufficient and necessary requirements for the project development.

Computer hardware is a collective term used to describe any of the physical components of an analog or digital computer .the term hardware distinguishes the tangible aspects of a computing device from software, which consists of written instructions that tell physical components what to do.

**Table 4.1: software and hardware requirements** 

S.No	Description	Requirement
1.	Operating system	Windows 7 and above
2.	Programming language	C++
3.	Software	Dev c++
4.	processor	Intel Core <sup>TM</sup> i7-8700 CPU @3.20GHz
5.	Ram	1 GB or more
6.	Disc space	20 GB or more

### 5. Results and Screenshots

Once program is executed, the User is presented with the console page as shown in the Fig 5.1. He/she selects the options given on the screen. Option 1(manager) gives the user access to many functions with which he may manage various values like grocery. Option 2 (customer)

Gives the user the power to order food from the menu which is in turn created by the manager.

```
who are you?

1.manager

2.customer

3.exit
```

Fig 5.1: Home Page of Inventory Management System

With the selection of option 1, the user is asked for a password . A sample screen for the same is presented in Fig 5.2. The user can select the function he wants to perform from the displayed menu.

```
who are you?

1.manager

2.customer

3.exit

1
enter password1234
good morning sir..
what do you wanna do?

1.add new grocery

2.add new dishes

3.add new groceries

4.update new groceries

5.check revenue

6.change password

7.check inventory

8.display menu

9.save items data

10.save inventory data

11.load previously entered item data

12.load previously entered grocery data

13.exit_
```

Fig 5.2: Display of functions available

The user can select the food he wants to have by selecting the number he wants from the menu as shown in the figure 5.3.

```
1.order food
2.exit
1
enter what you want to order
s.no 1
NAMEvitaminJuice
price= 100 rupees
s.no 2
NAMEchickenSandwicp
price= 70 rupees

2
how many?3
```

Fig 5.3: Serial Number, Name and Price of the items

The user is asked about the number of instances of the item he wants. Now as shown as in figure 5.4, for this instance the values of various inventory materials is this before the order of the customer took place.

After the order, the values of various inventory materials get decreased as shown as in fig 5.5

```
good morning sir...
what do you wanna do?
1.add new grocery
2.add new dishes
3.add new groceries
4.update new groceries
5.check revenue
6.change password
7.check inventory
8.display menu
9.save items data
10.save inventory data
11.load previously entered item data
12.load previously entered grocery data
13.exit7
         groceries name
                             quantity
                                                    price
s.no
                                  18 slices
     bread
                                                           20
     cheese
                                   20 veggies
                                                             20
                                                              150
      chicken
                                    3000 grams
     capsicum
                                    30 veggies
```

Fig 5.4: Inventory status before customer's order.

This is the present status after the customer's order in this instance of the run is shown in fig 5.5.

```
good morning sir..
what do you wanna do?
1.add new grocery
2.add new dishes
3.add new groceries
4.update new groceries
5.check revenue
6.change password
7.check inventory
8.display menu
9.save items data
10.save inventory data
11.load previously entered item data
12.load previously entered grocery data
        groceries name
                             quantity
      bread
                                  14 veggies
                                   2991 grams
                                                              150
                                    30 veggies
      capsicum
```

Fig 5.5: Updated inventory status after customer's order

## 6. Conclusion

This project is aimed at developing an online inventory management system . This inventory management system is an internet-based system that can be accessed through out the net and can be accessed by anyone who has a net connection.

- To develop an inventory management system
- To provide anytime any place service for the customer
- To make inventory management system user friendly
- To provide the users with most new technology and fastest service, that is secure, convenient and easy

# 7. Future Scope

- The system generates various types of information that can be used for various purposes.
- Makes people aware of technology.
- Makes cooking food easier.
- It is not complicated so any one can use this to book tickets.
- To utilize resources in efficient manner by increasing the productivity through automation .

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