**RESTAURANT MANAGEMENT SYSTEM**

**PROJECT REPORT**

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*To*

*The Mumbai University*

*in partial fulfillement of the requirements for second year of degree of*

*Bachelor of Computer Engineering*



**DEPERTMENT OF COMPUTER ENGINEERING**

**VIDYAVARDHINI’S COLLEGE OF ENGINEERING AND TECHNOLOGY**

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**CERTIFICATE**

*This is to certify that the mini project report for the subject of “Data Structures” entitled* **“FOOD ORDERING SYSTEM”** *is submitted by* **“SALMAN ANSARI(01)”,”PARTH DESAI(08)”,”HITESH GOSAVI(14)”** *in partial fulfilment of the requirements for the award of second year of the degree of Bachelor of Engineering in Computer Engineering to the Mumbai University as a record of work done by him/her under our supervision and guidance.*

**Prof. Sweety Rupani Project Guide**

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**ABSTRACT:**

Restaurant Management System is an application which will help restaurant to optimized and control over their restaurants. For the waiters, it is making life easier because they don’t have to go kitchen and give the orders to chef easily. For the management point of view, the manager will able able to control the restaurant by having all the reports to hand and able to see the records of each table and order. This application helps the restaurants to do all functionalities more accurately and faster way. Food Ordering System reduces manual works and improves efficiency of restaurant. This application is helping Food Ordering s to maintain the stock and cash flows and there are many more functionalities, like:

To store records.

Control orders and services.

Billings.

Control staff and their shifting.

Control multiple branches.

Helps Manager to control each part of the restaurant.

The main goal is to maintain the restaurant’s functions in an effective and accurate manner and also it is reducing the use of manual entries. This software helps food orders to maintain day to day records in system. It is keeping a proper record of the database.

**Functionality:**

It helps the restaurants to automate the process of food ordering. It helps to do billing very easily. Account maintenance also becomes easier. They can keep track of their purchases of inventories, staffs details, customer feedback, sales of foods, and account details etc. The software is provided with the facilities to find out the favorite food of the customers, and the seasonal foods, or customers to add or modify and delete their feedbacks and suggestions. It helps in managing data of different types of orders like party order, home delivery or the normal order.

Managing data of daily customers, managing data of staffs, managing data of daily expenses. It eliminates the drawbacks of existing system and also includes some more features.

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**PROBLEM DEFINITION**

* Many restaurants is storing all of their data in manual way. They have huge number of customers daily.
* Since a large number of people visit the restaurant daily, it is difficult to maintain the record of dish which is sold in large number. If someone want to check, then he has to do it manually.
* So because large number of customers, they need the help of some features so they can maintain and stores the records accurately.
* For managers in a restaurant at a rush hour, it is difficult to check which tables are empty and occupied.
* In large restaurant, it is difficult to keep track of the dishes which are to be served as there are large number of tables and each order has to be manually cancelled after it is served at the right table.
* If a order is placed with some customization and if the waiter forget to inform the chef, there is a miscommunication with wastage of time, food and money but with the help of this app it will be clear as water to everyone.
* They need full-fledged software to maintain their day to day transactions, orders and also regular update on records, cash transaction, daily staffs reports,
* In the existing system, entering all the details are done manually, it is taking lots of time and also there are chances for mistakes.
* It is a hassle to maintain the record of profit and loss on daily basis as we have to go through the bill manually.

**SCOPE OF PROJECT**

The proposed system helps in many ways. It helps to do billing very easily. Account maintenance also becomes easier. They can keep track of their purchases of inventories, staffs details, customer feedback, sales of foods, and account details etc. The software is provided with the facilities to find out the favorite food of the customers, and the seasonal foods, or customers to add or modify and delete their feedbacks and suggestions. It helps in managing data of different types of orders like party order, home delivery or the normal order.

Managing data of daily customers, managing data of staffs, managing data of daily expenses. It eliminates the drawbacks of existing system and also includes some more features.

**Advantages:**

RMS will stores all the records permanently and also gives the raises and deviations in the status of the restaurant in the markets.

All the records of the current and ex-staffs will be stored in the database.

All the shift timings of staffs, salary, extra working time and charge etc. are also updated daily.

Managers can view the kitchen side, floor side and the counter side details simultaneously and also can get details and updates from various branches.

Any cancelations of parties are also updated.

All the expenses per day will updated in the database daily.

Also keeps the record of food items prepared and the sales of food and also the record of balance food.

Less use of manual work.

Profits and losses will be updated every month and also shows the variations.

All the food order details like the order types (normal, home delivery, party order etc.) are stored daily.

**IMPLEMENTATION METHODOLOGY**

**Modules:**

* **Registration:** The user must register with the Name and Mobile number.
* **Login:** After registering, if the user is a regular or existing registered on our data base, we would know the number of times he visited and the items that he frequently ordered.
* **Accepting order:** After login, logo followed by the name of the restaurant is displayed. After a few seconds delay the menu is displayed. Then the customer has to give the order and specify the quantity of the item based on his requirements.
* **Kitchen:** Once the order is placed, it is passed to the kitchen for preparation. Once the order is ready, it is sent to the specific table.
* **Generating Bill:** As soon as the customer finishes eating, the bill is generated specifying all the details.
* **Menu record Updation:** You can delete a specific dish item on the basis of monthly sale or on the basis of customer review. Also you can add a new dish item which is chef’s signature item.

**SAMPLE CODE**

def vealbaconandcheesefries():

z14=Toplevel(w)

z14.geometry("550x550+350+100")

z14.focus\_set()

canvas = Canvas(z14, width = 1366, height = 768, bg = 'black')

canvas.pack(expand = YES, fill = BOTH)

image1 = ImageTk.PhotoImage(file = r"Shake-Shack.png")

canvas.create\_image(0, 0, image = image1, anchor = NW)

photox=PhotoImage(file = r"backbutton.png")

back=Button(z14, image=photox, compound = TOP, command=z14.withdraw)

back.image=photox

back.place(x=410,y=10)

photo1 = PhotoImage(file = r"veal bacon and cheese fries.png")

b1=Button(z14, text = 'Bacon & Cheese', image = photo1, compound = TOP, font='LITHOGRAPH')

b1.image=photo1

b1.place(x=70,y=100)

def add():

global count14

count14=count14+1

if count14>=10 :

count14=10

txtbox.delete("1.0",END)

txtbox.insert(END,count14)

else :

txtbox.delete("1.0",END)

txtbox.insert(END,count14)

def sub():

global count14

count14=count14-1

if count14<0 :

count14=0

txtbox.delete("1.0",END)

txtbox.insert(END,count14)

else :

txtbox.delete("1.0",END)

txtbox.insert(END,count14)

def cnf():

global total14

global count14

global bc1

global bc2

global bc3

global bc4

global bc5

global bc6

global bc7

global bc8

global bc9

global bc10

total14=price14\*count14

if(bc1==1):

db.insert1('Bacon & Cheese',count14,price14,total14)

elif(bc2==1):

db.insert2('Bacon & Cheese',count14,price14,total14)

elif(bc3==1):

db.insert3('Bacon & Cheese',count14,price14,total14)

elif(bc4==1):

db.insert4('Bacon & Cheese',count14,price14,total14)

elif(bc5==1):

db.insert5('Bacon & Cheese',count14,price14,total14)

elif(bc6==1):

db.insert6('Bacon & Cheese',count14,price14,total14)

elif(bc7==1):

db.insert7('Bacon & Cheese',count14,price14,total14)

elif(bc8==1):

db.insert8('Bacon & Cheese',count14,price14,total14)

elif(bc9==1):

db.insert9('Bacon & Cheese',count14,price14,total14)

elif(bc10==1):

db.insert10('Bacon & Cheese',count14,price14,total14)

count14=0

total14=0

z14.destroy()

txtbox=Text(z14,height=0.5,width=5,bd=0,font='LITHOGRAPH',fg="red",bg="black")

txtbox.place(x=368,y=165)

plus=Button(z14,text='+',font=('arial',16,'bold'),width=5,fg="red",bg="black",command=add)

plus.place(x=340,y=100)

minus=Button(z14,text='-',font=('arial',16,'bold'),width=5,fg="red",bg="black",command=sub)

minus.place(x=340,y=220)

b2=Button(z14, text = 'Confirm Order', compound = TOP, font='LITHOGRAPH',bd=0,fg="black",bg="red",command=cnf)

b2.place(x=325,y=300)

var = StringVar()

label1 = Label( z14, textvariable=var, relief=RAISED, justify=LEFT, font='LITHOGRAPH', bg = 'black', bd=0, fg = 'white' )

var.set("Topped with out Shack cheddar and\nAmerican cheese sauce with veal bacon")

label1.place(x=70,y=350)

var1 = StringVar()

label2 = Label( z14, textvariable=var1, relief=RAISED, justify=LEFT, font=('LITHOGRAPH',25), bg = 'black', bd=0, fg = 'red')

var1.set("$7")

price14=7

label2.place(x=70,y=420)

z14.title("Bacon & Cheese")

**RESULT**

This application offers hassle free and time-efficient way to manage orders for each over traditional paper-based method. This is very helpful for the all staff members of the restaurant to enter the desired information through so much simplicity.

The project takes basic idea of efficient management of restaurant records turning it into software implementation. The project makes use of Python language.

The flow of the project is easy to understand .The staff member of must go through three steps-register, login and modify. It is easy to add new dish items in the menu.

Thus project fulfills all the requirements need to successfully maintain records of the restaurant and simplify the food ordering process without any hassle.

**CONCLUSION**

All the data will be saved in the database. So the administer can view all the data on time.   
 This system reduces manual works.   
 All the records of the dishes that have been ordered are stored.  
 All the shift timings of staffs, salary, extra working time and charge etc. are also updated daily.  
 All the expenses per day will updated in the database daily.   
 Also keeps the record of food items prepared and the sales of food and also the record of balance food.   
 All the food order details like the order types (normal, home delivery, party order etc.) are stored daily.

**REFERENCES**

* "A Secular Shift to Online Food Ordering". TechCrunch. 2015-05-07.
* Associated Press. "Papa John's hits online ordering milestone." 5 May 2008.
* Soder, Chuck. "Online Ordering System Will Get Bigger Slice of Case Students' Pie." Crane's Cleveland Business News. 14 May 2007.
* The retailer, EY’s publication in consumer products and retail sector (Report). EY. January–March 2015.
* "Why Pizza Giants Want Customers to Click, Not Call, for Delivery". Adage.com. Retrieved January 10, 2016.
* "Delivery Start-Ups Are Back Like its 1999". The New York Times. Retrieved January 10, 2016.
* "Online food delivery ordering is about to overtake phone ordering in the US - Quartz". Qz.com. Retrieved January 10, 2016.
* "Restaurant food delivery heating up". Columbian.com. Retrieved January 10, 2016.
* "Peapod". Retrieved January 8, 2016.
* "Pizza Hut Celebrates 20th Anniversary of World's First Online Purchase With 50 Percent Off Online Deal for Hut Lovers Members". Restaurantnews.com. Retrieved January 8, 2016.