# THE RESTURANT MANAGEMENT SYSTEM

# INTRODUCTION

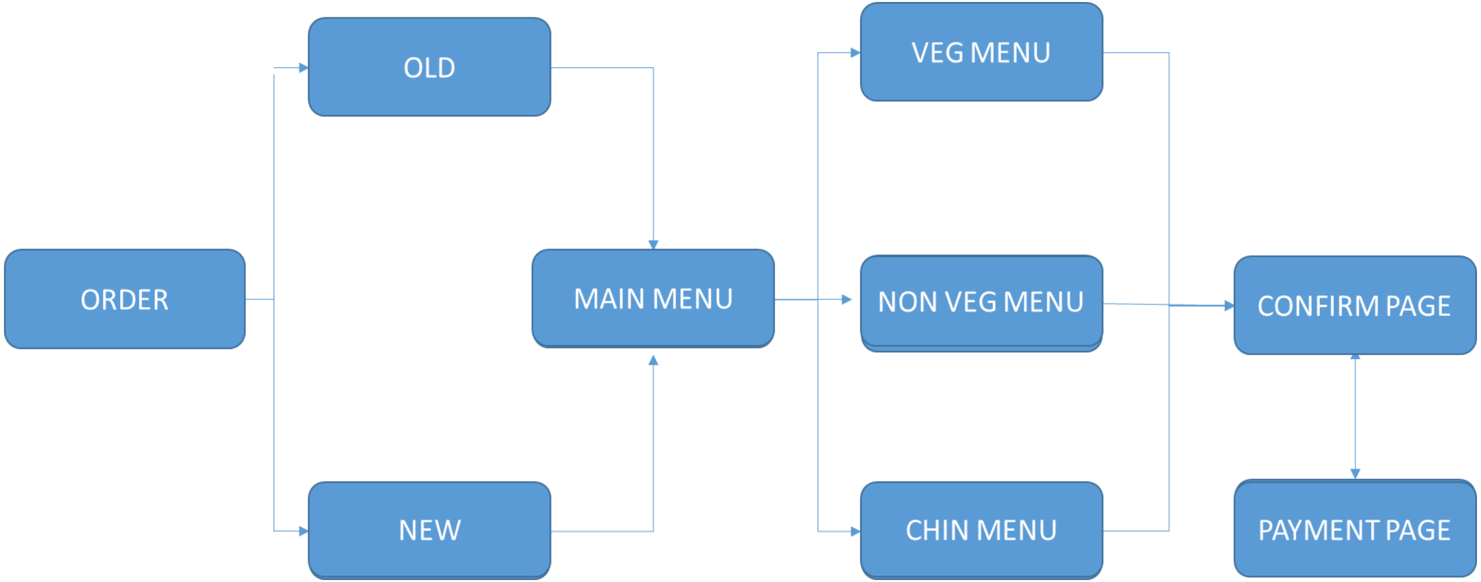
- As the name suggests that its is for ordering foods at a food house and updating of the menu ,discount price by the owner and generates bills of food ordered
- It save time and decreases the work of the owner and waiter too It will also help the owners to handle their customers in a better and a comfortable way

# AIM

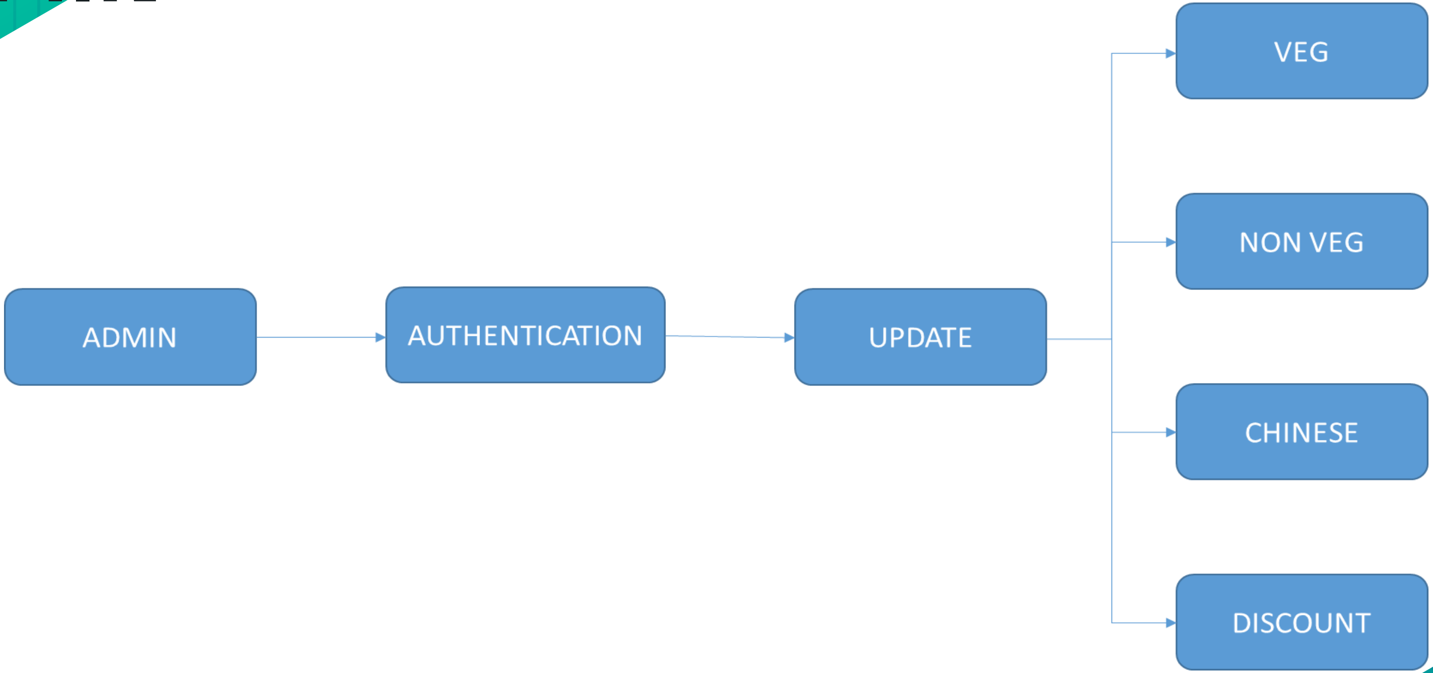
- As we know how much COVID 19 have affected us all and even more the small food chain as they don’t have much capital so we have designed this restaurant billing management system to help them recover faster in the race
- The RESTURANT BILLING MANAGEMENT SYSTEM  is a basic program which can be  used in small  restaurants and food chains so decreasing as much as direct human contact is possible

# FLOW OF CODE

# ORDER FOOD


ORDER
OLD
NEW
MAIN MENU
VEG MENU
NON VEG MENU
CHIN MENU
CONFIRM PAGE
PAYMENT PAGE

# ADMIN


ADMIN

AUTHENTICATION

UPDATE

VEG

NON VEG

CHINESE

DISCOUNT

# CODE EXPLANATION

# MENU CLASS

- For Insertion:-We first create a new node having name of the dish and their price. When the menu is empty, we updated both head and tail with the new node.
- After that for insertion we use tail node. We make the next node of tail as the new inserted node and update the tail to the new node, in this way we can perform the insertion in the time complexity of O(1).

# MENU CLASS

- For Deletion:-We first check whether the linked list is empty or not. If it is not empty then we traverse the list . If the required deleted dish is not in the list then we show an output "Dish not found the menu", and if the dish is found in the list then we simply delete it.
- For show menu:-We first ask the customer about their choice i.e. veg,non-veg,Chinese then we traverse the required list and display the name of the dish with their prices.

# CUSTOMER CLASS

- For Insertion:-We allocate a customer id to each of our first time customer. The customer node consists of an id and no. of visits of the customer to our hotel. In this also we have two nodes start and End so that the insertion of the customer can be performed in O(1) time complexity.
- For increasing no. of visits:- Upon the arrival of the customer we ask for their customer id if they have already visited our hotel earlier, then we traverse the customer list and update their no. of visits by 1. If the id given by customer is not found in our record then we display a message "No such id is found".

# CUSTOMER CLASS

- For discount:- We also give discount to our regular customer according to their no. of visits. For visits greater than 20 we gave a discount of 25% and for visits greater than 10 we gave a discount of 15%.

# DATABASE

- Files was used to store data in a storage device permanently.
- File handling provides a mechanism to store the output of a program in a file and to perform various operations on it.
- We have used files as a database to store the food items in the menu  and order list and the customer id and last id for  all the function in the program

# FILES

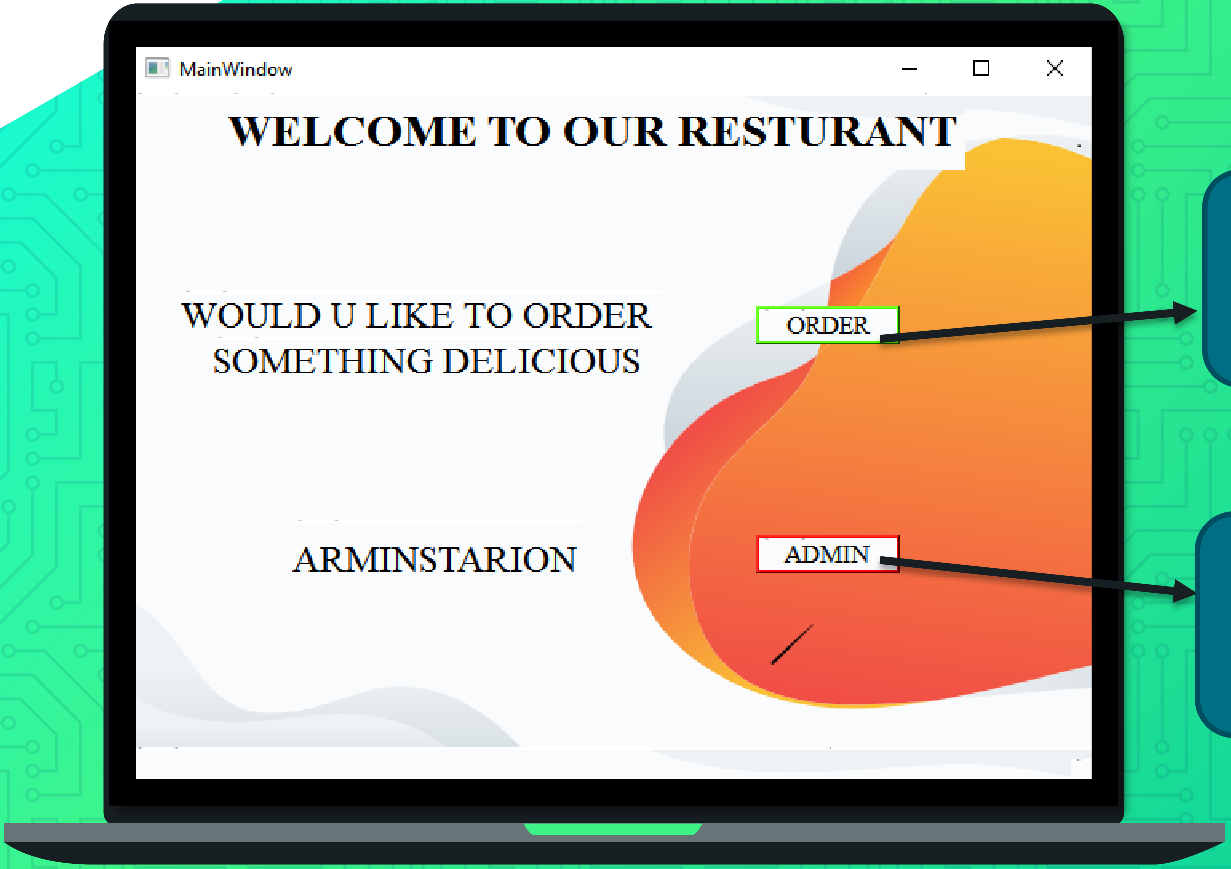
- Veg.txt:-it store the information of all the veg dishes that are inserted by the owner and can be ordered by the customer.The file store the data in the format of first line as name and second as the price .
- nonVeg.txt:-it store the information of all the nonVegdishes that are inserted by the owner and can be ordered by the customer.The file store the data in the format of first line as name and second as the price

# FILES

- Chinese.txt:- it store the information of all the Chinese dishes that are inserted by the owner and can be ordered by the customer.The file store the data in the format of first line as name and second as the price
- Customer.txt:-it conatins the id of the customers and the no fo visits

# GUI

# MAIN WINDOW



WELCOME TO OUR RESTURANT

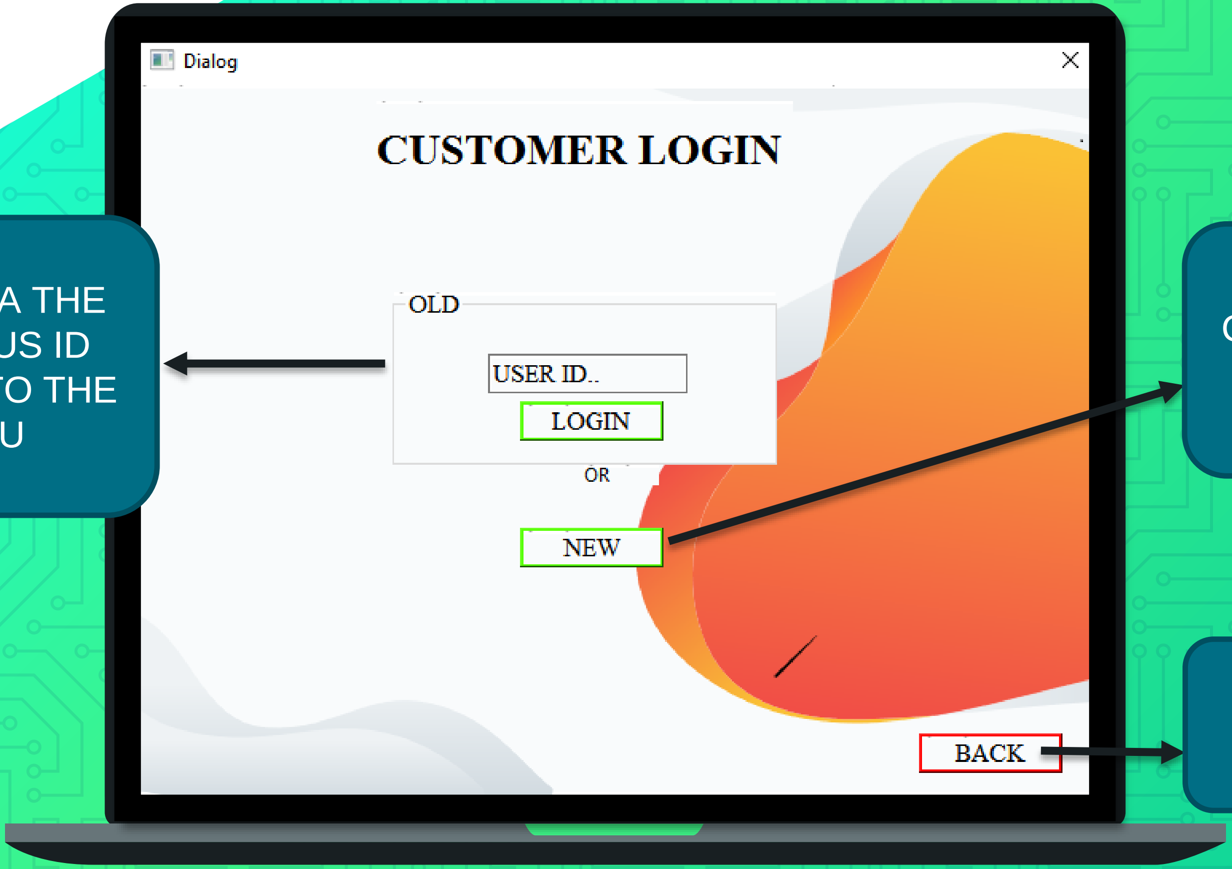
WOULD U LIKE TO ORDER
SOMETHING DELICIOUS

ARMINSTARION

ORDER BUTTON TO GO TO THE MENU PAGE

ADIM BUTTON TO GO TO ADMIN AUTHENTICATION PAGE

# CUSTOMER LOGIN PAGE

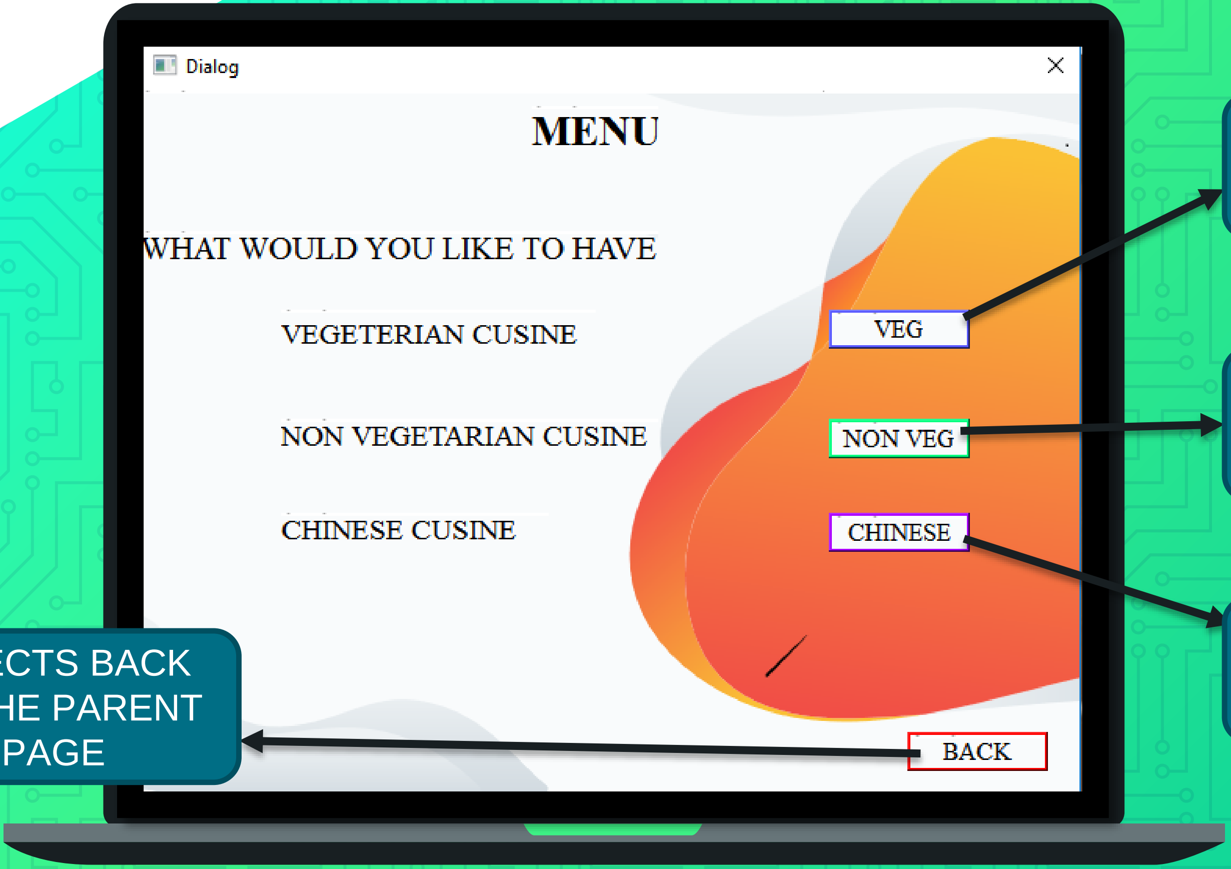


LOGIN VIA THE PREVIOUS ID AND GO TO THE MENU

ADD A NEW CUSTOMER IN THE DATABASE AND GO TO MENU

GO BACK TO PARENT PAGE

# MAIN MENU PAGE



Dialog

MENU

WHAT WOULD YOU LIKE TO HAVE

VEGETERIAN CUSINE

NON VEGETARIAN CUSINE

CHINESE CUSINE

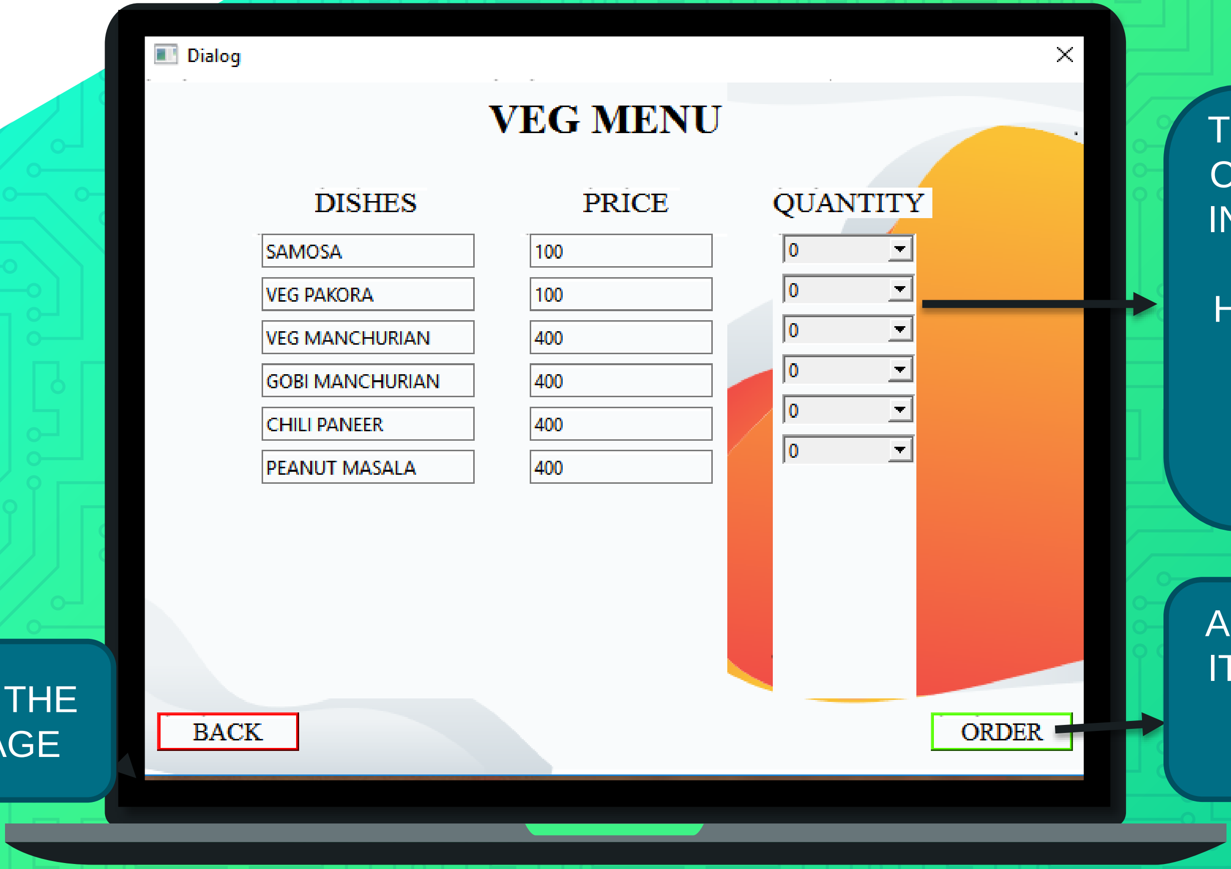
DIRECTS TO THE VEG MENU PAGE

DIRECTS TO THE NON VEG MENU PAGE

DIRECTS TO THE CHINESE MENU PAGE

DIRECTS BACK TO THE PARENT PAGE

# VEG MENU PAGE



## VEG MENU

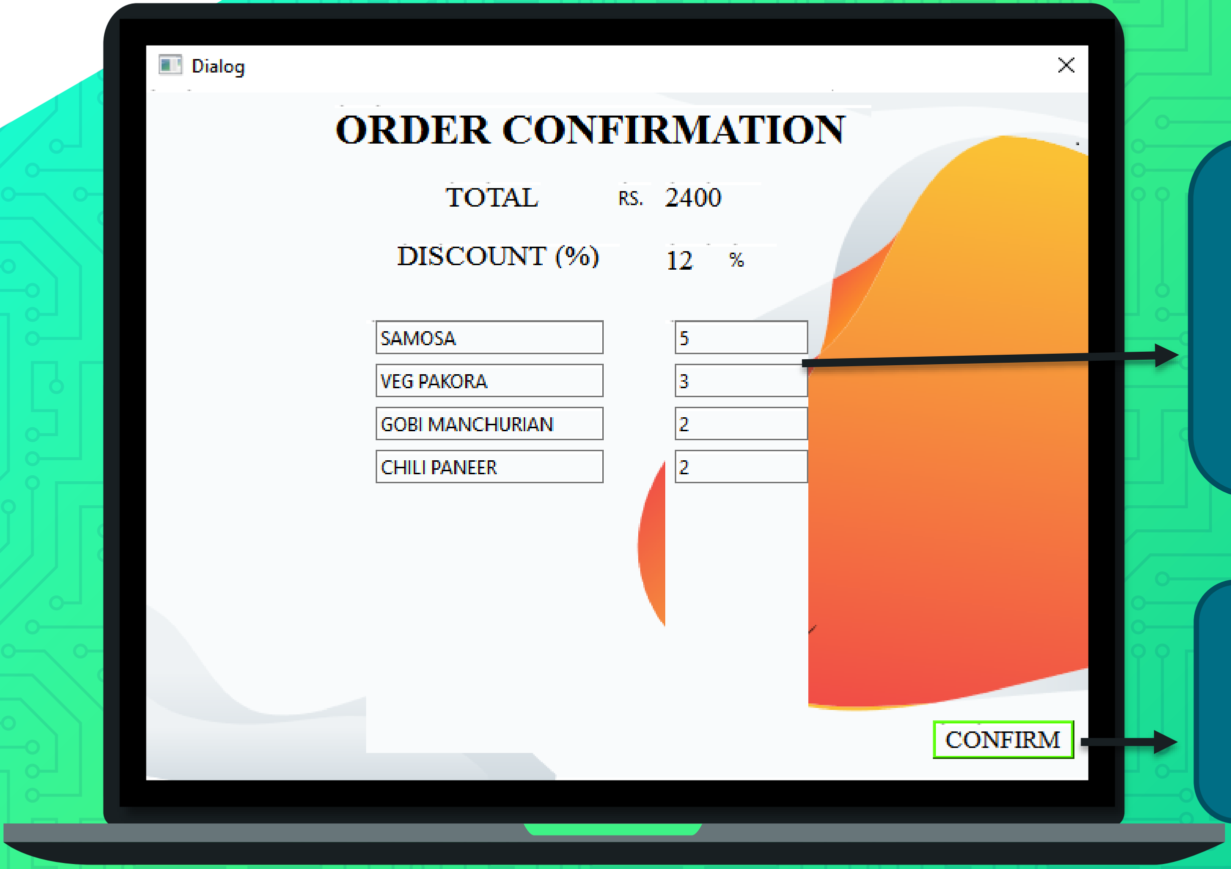
| DISHES | PRICE | QUANTITY |
|---|---|---|
| SAMOSA | 100 | 0 |
| VEG PAKORA | 100 | 0 |
| VEG MANCHURIAN | 400 | 0 |
| GOBI MANCHURIAN | 400 | 0 |
| CHILI PANEER | 400 | 0 |
| PEANUT MASALA | 400 | 0 |

THE FORM LAYOUT CANTAINS ALL THE INFO OF THE FOOD AVAILABLE AND HAVE COMBO BOX TO SET THE QUANTITY TO SELECT BY THE CUSTOMER

ALL THE SELECTED ITEM AND TOTAL IS PASSED TO THE NEXT PAGE

DIRECTS TO THE PARENT PAGE

# ORDER CONFIRMATION PAGE



ORDER CONFIRMATION

TOTAL RS. 2400

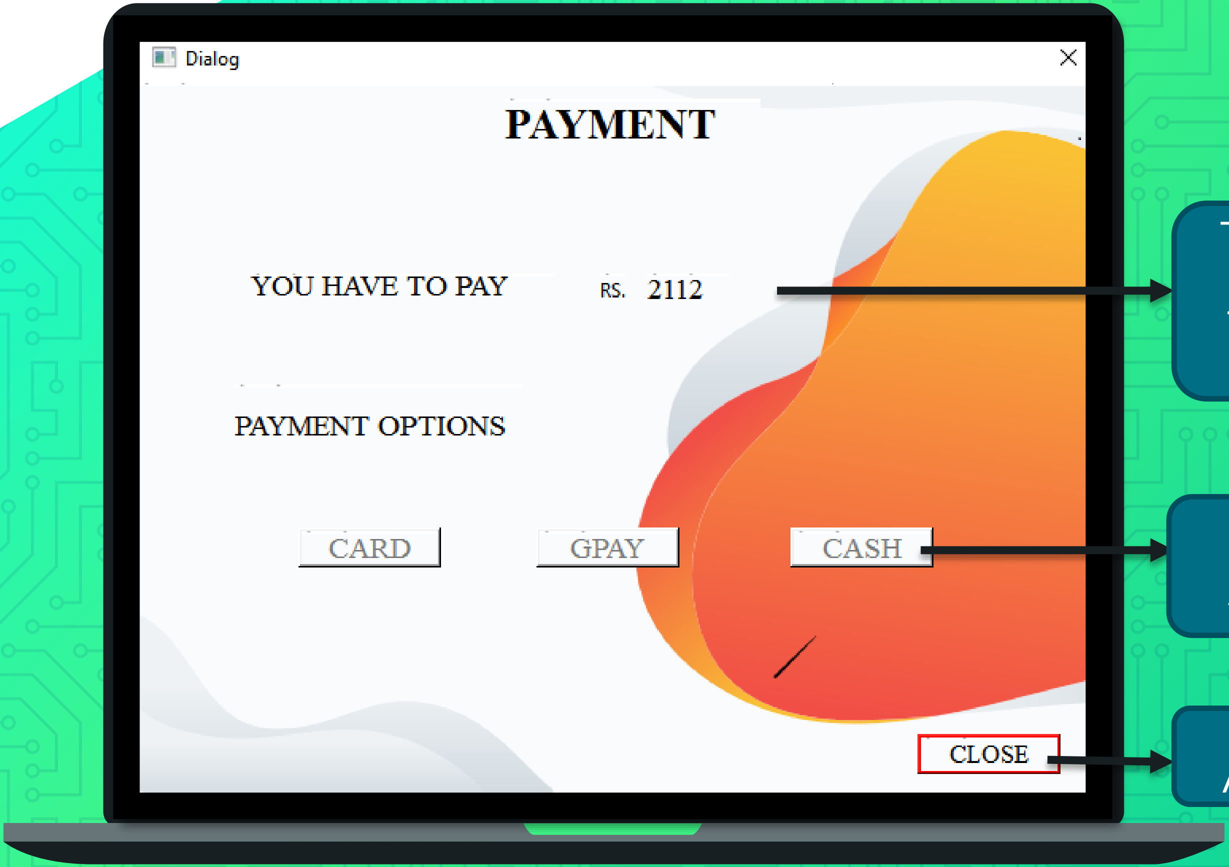
DISCOUNT (%) 12 %

| | |
|---|---|
| SAMOSA | 5 |
| VEG PAKORA | 3 |
| GOBI MANCHURIAN | 2 |
| CHILI PANEER | 2 |

THE TOTAL PRICE AND THE LIST OF ALL THE ITEMS SELECTED IS PASSED HERE BY THE PARENT PAGE

CONFIRM BUTTON CONFIRM THE ORDER AND DIRECTS TO THE PAYMENT PAGE

# PAYMENT PAGE



Dialog

PAYMENT

YOU HAVE TO PAY RS. 2112

PAYMENT OPTIONS

THE TOTAL IS PASSED BY THE PARENT PAGE

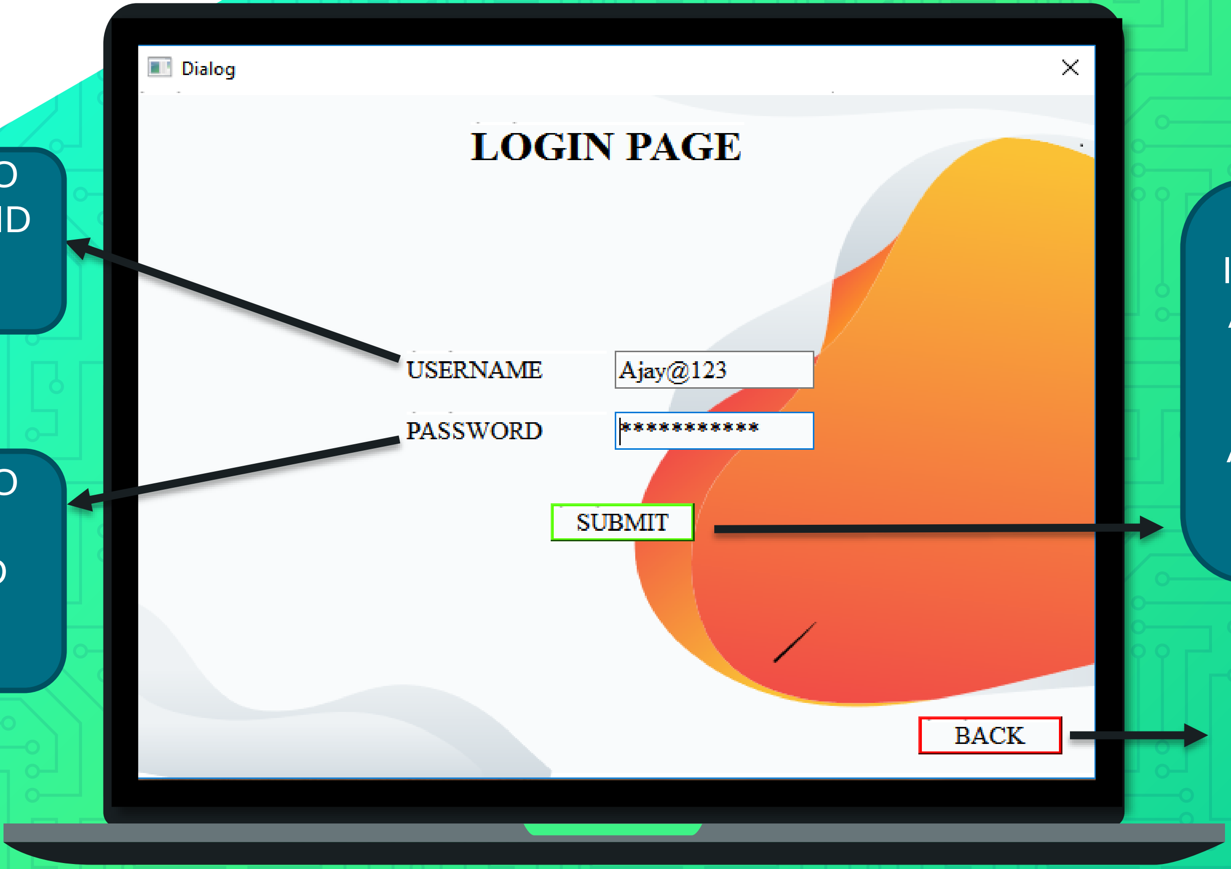
PAYMENT OPTIONS *(DISABLED)

CLOSE THE APPLICATION

# LOGIN PAGE

LINE EDIT TO READ USER ID FROM THE USER

LINE EDIT TO READ PASSWORD FROM THE USER



Dialog

LOGIN PAGE

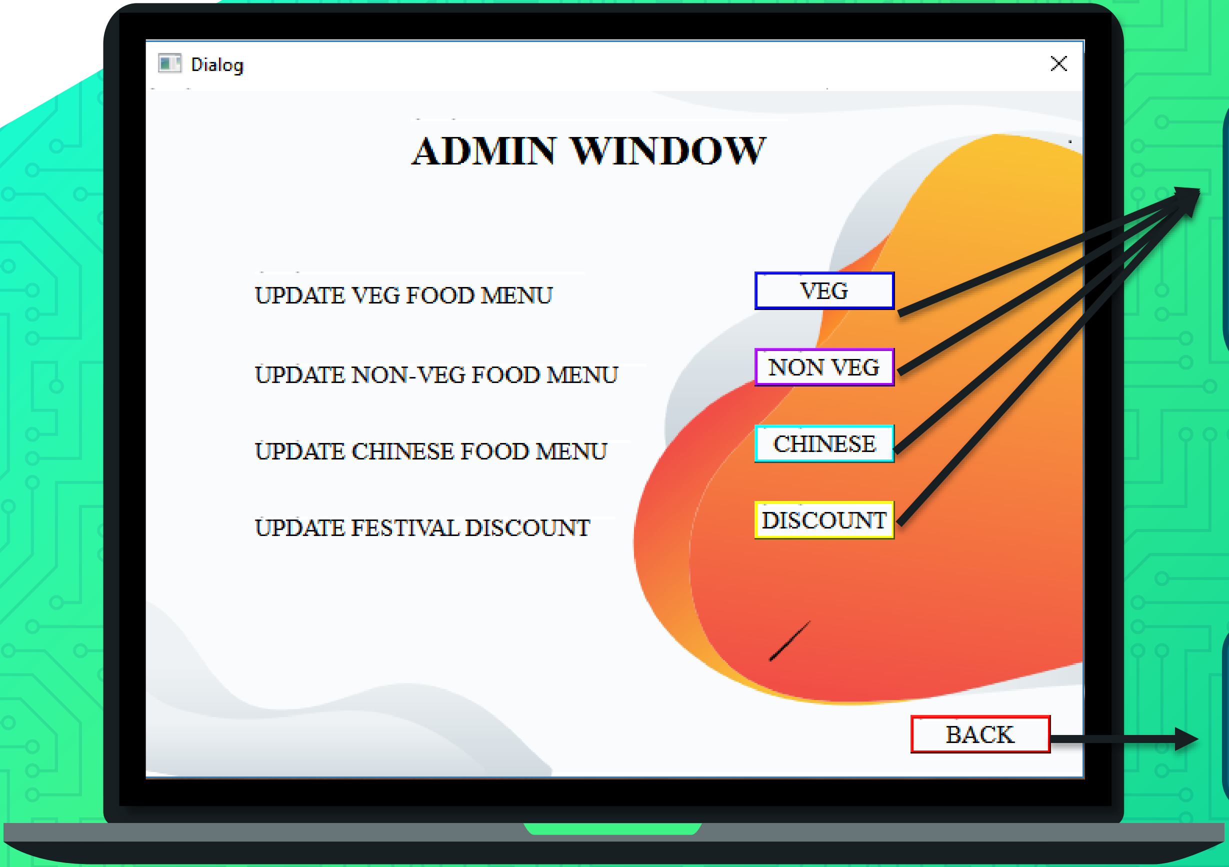
USERNAME Ajay@123

PASSWORD ************

SUBMIT THE USER ID AND PASSWORD AND CHECK THEIR AUTHENTICATION IN THE DATABASE AND IF TRUE THEN DIRECTS TO THE ADMIN PAGE

DIRECTS TO THE PARENT PAGE

# ADMIN WINDOW



Dialog

ADMIN WINDOW

UPDATE VEG FOOD MENU

UPDATE NON-VEG FOOD MENU

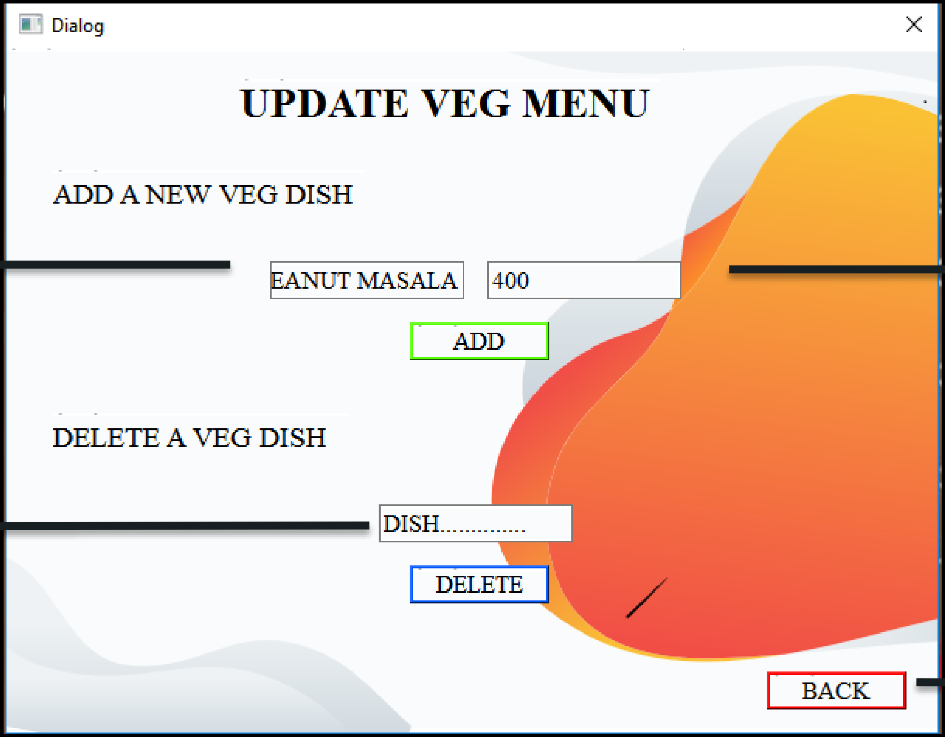
UPDATE CHINESE FOOD MENU

UPDATE FESTIVAL DISCOUNT

DIERECTS TO THE SPECIFIC PAGE WHERE THE DISHES IN THE MENU CAN BE UPDATED

DIRECTS TO THE PARENT PAGE

# UPDATE PAGE



UPDATE VEG MENU

ADD A NEW VEG DISH

EANUT MASALA

400

DELETE A VEG DISH

DISH..............

LINE EDIT FOR THE NAME OF THE NEW DISH

LINE EDIT FOR THE PRICE OF THE NEW DISH

LINE EDIT FOR DELETING A DISH FROM THE MENU

DIRECTS TO THE PARENT PAGE

THANKS