SMART BILLING SYSTEM FOR RESTAURANT

CONTENTS:

INTRODUCTION:

The project "Smart Billing system" is an automate to ordering and billing of a "Restaurant". This system is a basic program of used in restaurants. The main aim is to perform the process of ordering and billing of a "Restaurant". This system is named as "Smart Billing System For Restaurant". This is designed for a restaurant which wants to attend their customers in a very well manner. This system has the capability of give to the amount. The program is easily executable and can be easily accessed by a user. The system for save the time and decreases the work of the owner of the restaurant.

OBJECTIVES:

To provide a Computer based ordering and billing system. This system is accurate computation of bills.This system is reduce the time.To generate the quanity of foods and their amount and its provide convenient billing method.It is required for cost maintain.The should to be modified able depending on the changing needs if the user.

BENIFITS:

- Easy way of use
- Simpilified accounting
- Save Time and Cost maintain
- Increased efficiency
- Accuracy and detailed in menu and prices

4W'S and H:

WHAT

Restaurants employees use the system gives the menu and make the payment.

WHY

Restaurant billing software enables simply to choose our menu and calculates the amount of billing. This system is effectively used for ordering and billing purposes.

WHEN

Smart billing system is the process of billing and ordering, it includes the calculating the amount, made to improve any restaurants with the use of modern technology.

WHO

This Smart Billing System is used by all the Restaurants.

HOW

Set of our menus Create clear and detailed menu with their prices Its refers to the direct billing.

ANALYSIS

ADVANTAGES:

- Quick and Easy to manage, use
- Automating the time consuming
- And track the menu with prices
- These remains make the amount is paid on time.
- Faster Billings

DISADVANTAGES

- Reaching offline Internet makes the process difficult It is not cost effective for small business owner

PURPOSES:

- BILLING SYSTEM eliminates the manual interventionist performance reports to the keep track of the business growth

NEEDS:

- Simple menu setup.
- User friendly order system
- Better customer service
- Support payment system

HIGH LEVEL REQUIREMENTS:

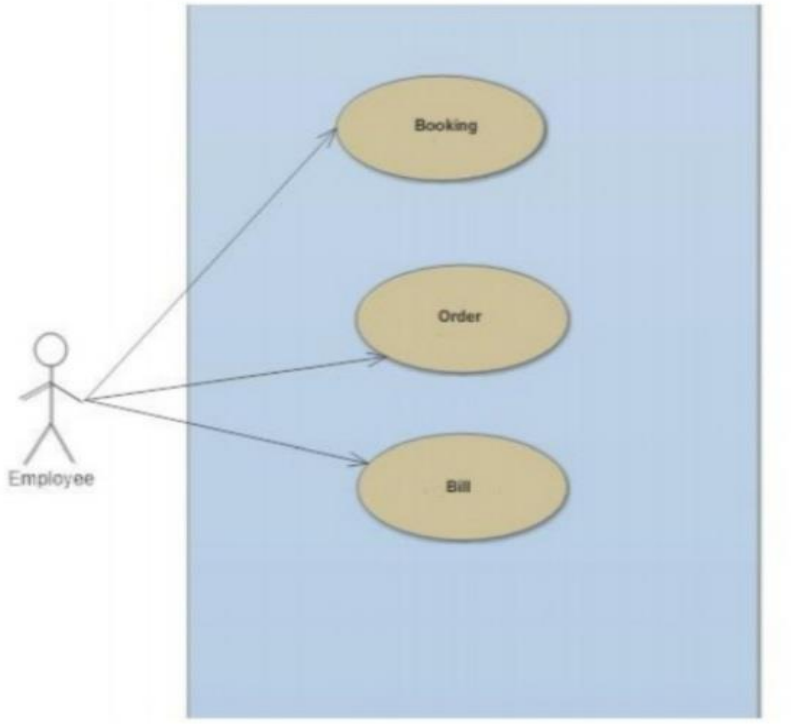
HLR1 --- C LANGUAGE --- IMPLEMENTED
HLR2 --- OS WINDOWS --- IMPLEMENTED
HLE3 --- HARDISK --- IMPLEMENTED
HLR4 --- RAM 4GB --- IMPLEMENTD

LOW LEVEL REQUIREMENTS:

LLR1 --- FOOD MENU ---STATUS
LLR2 --- ADD MENU --- IMPLEMENTED
LLR3 --- ADD QUANTITY --- IMPLEMENTED

LLR4 --- ADD PRICE --- IMPLEMENTED

DESIGN:



CODINGS:

```
#include <stdio.h>
#include <ctype.h>
#include <stdlib.h>
#include <conio.h>
#include <windows.h>
#include <string.h>
#include<time.h>

void chat();
void mainmenu();
void exit();

COORD coord = {0,0};
void gotoxy(int x,int y)

{
    coord.X = x;
    coord.Y = y;
    SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE),coord);
}

int num;
float price;
float total;
char choice;
int again;

void main()
```

```
{
      mainmenu();
}

void mainmenu()
{
      char choice = ' ' ;
  printf("\n\t\t\t       +      +      WELCOME TO Ctrl Alt FOOD RESTAURANT   +
+");
  printf("\n\n\n\n\n");
  printf("\n\t\t\t\t\t\t\t FOOD MENU\n\t\t\t\t\t\t
_____________________________________________");
  printf("\n\t\t\t\t\t| [1] CHAT MENU                                        |");
  printf("\n\t\t\t\t\t| _____________________________________________________|");
  printf("\n\t\t\t\t\t| [0] EXIT
|\n\t\t\t\t\t|_____________________________________________|
\n\t\t\t\t\t\t\t\t\t");
  printf("\n\t\t\t\t\t       ************************************\n");
  printf("\n\t\t\t\t\t");
  time_t t;   // not a primitive datatype
  time(&t);
  printf("\t %s", ctime(&t));
  printf("\n\t\t\t\t\t       ************************************\n");
  printf("\n\n\n\t\t\t\t\tPlease select your chat choice: ");
  scanf("%c", &choice);
  system("cls");

    {
          if (toupper(choice) == '1')
            chat();
        else if (toupper(choice) == '0')
             exit(0);
        else if (toupper(choice) != '1', '0')
            {
               mainmenu();
            }
      }
}
void chat() /// chat Menu Screen
{
  int choice;
  int quantity;
  int again;
  printf("\t                          CHAT MENU   \n");
  printf("\t   [1] Pani Puri    - Rs50 \n");
  printf("\t   [2] Bhel Puri          - Rs60 \n");
  printf("\t   [3] Veg Toast          - Rs50 \n");
  printf("\t   [4] Pav Bhaji          - Rs75 \n");
  printf("\t   [5] Sandwich     - Rs75 \n");
  printf("\t   [6] Suggestions                    \n");
  printf("\t   [7] Back To Main-Menu              \n");
  printf("\n \t   Enter your choice here : ");
  scanf("%d", &choice);
  {
      if (choice == 1)
         {
            printf("Enter Quantity : ");
            scanf("%d", &quantity);
            total = 50 * quantity ;
            printf("==================================          ");
          printf("\nYour total bill amount is Rs%.2f,\nPayment: CASH\n", total);
          printf("==================================          \n");
              {
                   printf("\nWould you like to order more?\nEnter [1] - Yes,
Enter [2] - No : ");
                scanf("%d", &again);
                    system("cls");
                    if (again == 1 )
                         chat();
```

```
               else if (again == 2 )
                         mainmenu();
                   else if (again != 1 , 2)
               {
                        printf("\n\n\t\tSorry Invalid Decision Entered\n\n");
                        exit(0);
                    }
       }
}
      else if ( choice == 2)
       {
              printf("Enter Quantity : ");
              scanf("%d", &quantity);
              total = 60 * quantity ;
              printf("==================================          ");
           printf("\nYour total bill amount is Rs%.2f,\nPayment: CASH\n", total);
           printf("==================================          \n");
              {
                printf("\nWould you like to order more?\nEnter [1] - Yes, Enter
[2] - No : ");
                scanf("%d", &again);
                system("cls");
                if (again == 1 )
                     chat();
                else if (again == 2 )
                     mainmenu();
                else if (again != 1 , 2)
                  {
                     printf("\n\n\t\tSorry Invalid Decision Entered\n\n");
                     exit(0);
                  }
              }
       }
    else if ( choice == 3 )
        {
            printf("Enter Quantity : ");
            scanf("%d", &quantity);
            total = 60 * quantity ;
            printf("==================================          ");
            printf("\nYour total bill amount is Rs%.2f,\nPayment: CASH\n",
total);
            printf("==================================          \n");
            {
                        printf("\nWould you like to order more?\nEnter [1] -
Yes, Enter [2] - No : ");
                        scanf("%d", &again);
                        system("cls");
                        if (again == 1 )
                              chat();
                        else if (again == 2 )
                    mainmenu();
                        else if (again != 1 , 2)
                              {
                                printf("\n\n\t\tSorry Invalid Decision
Entered\n\n");
                                exit(0);
                              }
            }
        }
    else if ( choice == 4 )
        {
            printf("Enter Quantity : ");
            scanf("%d", &quantity);
            total = 75 * quantity ;
            printf("==================================          ");
            printf("\nYour total bill amount is Rs%.2f,\nPayment: CASH\n",
total);
            printf("==================================          \n");
            {
```

```
                        printf("\nWould you like to order more?\nEnter [1] -
Yes, Enter [2] - No : ");
                        scanf("%d", &again);
                        system("cls");
                        if (again == 1 )
                              chat();
                        else if (again == 2 )
                    mainmenu();
                        else if (again != 1 , 2)
                              {
                                printf("\n\n\t\tSorry Invalid Decision
Entered\n\n");
                                exit(0);
                              }
            }
        }
    else if ( choice == 5 )
        {
            printf("Enter Quantity : ");
            scanf("%d", &quantity);
            total = 75 * quantity ;
            printf("==================================          ");
            printf("\nYour total bill amount is Rs%.2f,\nPayment: CASH\n",
total);
            printf("==================================          \n");
            {
                        printf("\nWould you like to order more?\nEnter [1] -
Yes, Enter [2] - No : ");
                        scanf("%d", &again);
                        system("cls");
                        if (again == 1 )
                              chat();
                        else if (again == 2 )
                    mainmenu();
                        else if (again != 1 , 2)
                              {
                                printf("\n\n\t\tSorry Invalid Decision
Entered\n\n");
                                exit(0);
                              }
            }
         }
         else if ( choice == 6 )
        {
            FILE *fp, *ft;
             char another, choice;

             struct emp
              {
                char name[40];
                int pri;
              };
    struct emp e; // structure variable creation
    char empname[40]; // string to store name of the chat
    long int recsize; // size of each record of chat
    fp = fopen("FOS.DAT","rb+");
    if(fp == NULL)
    {
        fp = fopen("FOS.DAT","wb+");
        if(fp == NULL)
        {
            printf("Cannot open file");
            exit(1);
        }
    }
    // size of each record i.e. size of structure variable e
    recsize = sizeof(e);

    while(1)
```

```
    {
        system("cls"); //clear the console window
        gotoxy(30,10); // move the cursor to position 30, 10 from top-left
corner
        printf("1. Add Food");
        gotoxy(30,12);
        printf("2. Display Food");
        gotoxy(30,14);
        printf("3. Delete Food");
        gotoxy(30,16);
        printf("4. Back To Main-Menu");
        gotoxy(30,18);
        printf("Your Choice: ");
        fflush(stdin); // flush the input buffer
        choice  = getche();
        switch(choice)
        {
        case '1':
            system("cls");
            fseek(fp,0,SEEK_END); // search the file and move cursor to end of
the file
            // here 0 indicates moving 0 distance from the end of the file

            another = 'y';
            while(another == 'y')
            {
                printf("\nEnter Item Name: ");
                scanf("%s",e.name);
                printf("\nEnter Price: ");
                scanf("%d", &e.pri);
                fwrite(&e,recsize,1,fp); // write the record in the file
                printf("\nAdd another record(y/n) ");
                fflush(stdin);
                another = getche();
            }
            break;
        case '2':
            system("cls");
            rewind(fp); //this moves file cursor to start of the file
            while(fread(&e,recsize,1,fp)==1)  // read the file and fetch the
record one record per fetch
            {
                printf("\nItem is %s",e.name);
                printf("\nPrice is: %d",e.pri);
            }
            getch();
            break;
        case '3':
            system("cls");
            another = 'y';
            while(another == 'y')
            {
                printf("\nEnter name of Food to delete: ");
                scanf("%s",empname);
                ft = fopen("Temp.dat","wb");  // create a inteRs.ediate file for
temporary storage
                rewind(fp); // move record to starting of file
                while(fread(&e,recsize,1,fp) == 1)  // read all records from
file
                {
                    if(strcmp(e.name,empname) != 0)  // if the entered record
match
                    {
                        fwrite(&e,recsize,1,ft); // move all records except the
one that is to be deleted to temp file
                    }
                }
                fclose(fp);
                fclose(ft);
```

```
                remove("FOS.DAT"); // remove the original file
                rename("Temp.dat","FOS.DAT"); // rename the temp file to
original file name
                fp = fopen("FOS.DAT", "rb+");
                printf("Delete another record(y/n)");
                fflush(stdin);
                another = getche();
            }
            break;
        case '4':
            fclose(fp);// close the file
            system("cls");
            chat();
        }
    }

       }
     else if ( choice == 7 )
        {
            mainmenu();
        }
     else if (choice != 1,2,3,4,5,6,7,8)
            {
                system("cls");
                printf("\n\n\t\t   Invalid Choice Entered\n\n");
                chat();


            }
  }

}

void exit(back)  /// Exit Screen
{
  printf("\n\n\t   ====================================          ");
  printf("   \n           :-)Thanks for choosing our Restaurant!\n\n");
  printf("           :-)Have a nice day...Visit Again!  \n");
  printf("\t   ====================================  \n");
  getch();
  exit(0);
}
```

OUTPUT:

+ + WELCOME TO Ctrl Alt FOOD RESTAURANT + +

FOOD MENU

| [1] CHAT MENU |

| [0] EXIT |

****

Sun Apr 03 20:26:23 2022

****

Please select your chat choice: 1

CHAT MENU

[1] Pani Puri - Rs50

[2] Bhel Puri - Rs60

[3] Veg Toast - Rs50

[4] Pav Bhaji - Rs75

[5] Sandwich - Rs75

[6] Suggestions

[7] Back To Main-Menu

Enter your choice here : 2

Enter Quantity : 1

==========

Your total bill amount is Rs60.00,

Payment: CASH

==========

Would you like to order more?

Enter [1] - Yes, Enter [2] - No:

==========

:-) Thanks for choosing our Restaurant!

:-) Have a nice day...Visit Again

==========

CONCLUSION:

The documentation includes all necessary information on the structure and the Coding of the program created for Restaurant Billing system.