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Report:

RESTAURANT BILL GENERATION SYSTEM

Course Code: <CODE>



Version Number:

Team Members :

Team No:

Module: Model Based System Engineering

**DECLARATION**

I hereby declare that the attached documents are correct and valid to the best of my knowledge.

**SNEHA S R**

# 

**ABSTRACT:**

Restaurant Bill Generation System is a project that manages and stores billing information electronically according to customer’s food item order. The system helps the restaurant management to keep a constant track of the order details with quantity and generate bill with the tax and discount accordingly. The project titled Restaurant Bill Generation System is Restaurant Bill Generation System for monitoring and controlling the transactions in a restaurant. The project “Restaurant Bill Generation System” is developed in C, which mainly focuses on the menu generation according to the customer and the final net bill generation.This project “Restaurant Bill Generation System” enables the customer(adult and children) to select their required food items from the menu and also allows to select the quantity of each food item for an individual.Also,it generates the bill amount inclusive of taxes and discounts.This project is implemented to enable the customers to order the food items and generate the bill amount by themselves.

**IMPLEMENTATION:**

#include<stdio.h>

#include<string.h>

#include<stdlib.h>

double price[7] = {15.80 , 10.50 , 19.00 , 14.00 , 12.00 , 22.00 , 16.00 };

double mealTaxPrices[7];

int adultNumber,childNumber;

void printMeals();

void orderMeals();

double orderForAdult();

double orderForChildren();

int main()

{

char response = 'y';

printMeals();

while(response == 'y'|| response == 'Y')

{

printf("please enter number of adults :");

scanf("%d",&adultNumber);

printf("please enter number of children:");

scanf("%d",&childNumber);

orderMeals();

printf("\nwould you like to continue(y/n):");

scanf("\n%c",&response);

}

printf("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* THANKS FOR DINING HERE \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

printf("\20\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PLEASE VISIT AGAIN \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\20 \n");

system("pause");

return 0;

}

void printMeals()

{

printf("\20\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* WELCOME TO SNEHA RESTURANT \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\20\n");

printf(" \t\t\t Below is the menue:\20\n");

printf(" \t\t\t MEALS\t\t\tPRICE:\n");

printf(" \t\t\t \22\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\22\n");

printf(" \t\t\t 1- Mushroom Dosa\t\tRM15.80\n");

printf(" \t\t\t 2- Babycorn Manchurian\t\tRM10.50\n");

printf(" \t\t\t 3- White Sause Pasta\t\tRM19.00\n");

printf(" \t\t\t 4- Caramel Popcorn\t\tRM14.00\n");

printf(" \t\t\t 5- Oreo Milkshake\t\tRM12.00\n");

printf(" \t\t\t 6- Paneer Fried Rice\t\tRM22.00\n");

printf(" \t\t\t 7- Soya Briyani\t\tRM16.00\n");

printf("\n");

}

void orderMeals()

{

double totalPriceForAdult, totalPriceForChildren;

double allPayment,discount;

printf(" \t\t\*\*\*\* ORDER MENUE\*\*\*\*\n");

totalPriceForAdult = orderForAdult();

totalPriceForChildren = orderForChildren();

allPayment = totalPriceForAdult + totalPriceForChildren ;

printf("\n \t\t \22\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\22 \n");

printf(" \t\t \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* final BILL \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \n");

printf(" \t\t\tadult/child\tcount\t\ttotal price\n");

printf(" \t\t\tadults\t\t%d\t\t%5.2f\n",adultNumber,totalPriceForAdult);

printf(" \t\t\tchildren\t%d\t\t%5.2f\n",childNumber,totalPriceForChildren);

printf(" \t\t\tTotal bill\t\t\t%5.2f\n",allPayment );

if(allPayment < 10)

discount=((allPayment \* 0.5)/100);

else if(allPayment>= 10 && allPayment<20)

discount=((allPayment \* 1)/100);

else if(allPayment>= 20 && allPayment<30)

discount=((allPayment \* 1.5)/100);

else if(allPayment>= 30 && allPayment<40)

discount=((allPayment \* 2.0)/100);

else

discount= ((allPayment \* 5.0)/100);

printf(" \t\t\tTotal bill after discount\t%5.2f\n",allPayment-discount);

}

double orderForAdult()

{

int menuOption,i,amount;

char response = 'y';

double totalPerPerson = 0.0,totalAllPerson = 0.0;

double tax = 5.0;

if(adultNumber <=0)

printf("\n ");

else

printf("\*\tadults:\n");

for(i=0;i<adultNumber;i++)

{

printf("adult %d please enter your orders\n",i+1);

while(response == 'y' || response == 'Y')

{

printf("please enter your option:");

scanf("%d",&menuOption);

if(menuOption<1 || menuOption>7)

{

printf("sorry we don`t have this order \nagain! ");

continue;

}

printf("please enter your amount of order:");

scanf("%d",&amount);

totalPerPerson = totalPerPerson + (amount \* price[menuOption - 1] );

printf("\nWould you like to enter more orders(y/n):");

scanf("\n%c",&response);

}

printf("\n");

totalAllPerson += totalAllPerson + totalPerPerson;

totalPerPerson = 0.0;

response = 'y';

}

return totalAllPerson + ((totalAllPerson \* tax) / 100);

}

double orderForChildren()

{

int menuOption,i,amount;

char response = 'y';

double totalPerChild = 0.0,totalAllChildren = 0.0;

double tax = 5.0,oneOrder;

if(childNumber <=0)

printf("\n");

else

printf("\*\tChildren:\n");

for(i=0;i<childNumber;i++)

{

printf("child %d please enter your orders\n",i+1);

while(response == 'y' || response == 'Y')

{

printf("please enter your option:");

scanf("%d",&menuOption);

if(menuOption<1 || menuOption>7)

{

printf("sorry we don`t have this order \nagain! ");

continue;

}

printf("please enter your amount of order:");

scanf("%d",&amount);

oneOrder = (price[menuOption - 1] \* 60)/100 ;//this one order for a child with discount %60 of one order of adult

totalPerChild = totalPerChild + (amount \* oneOrder);

printf("Would you like to enter more orders(y/n):");

scanf("\n%c",&response);

}

totalAllChildren += totalAllChildren + totalPerChild;

response = 'y';

totalPerChild = 0.0;

printf("\n");

}

return totalAllChildren + ((totalAllChildren \* tax) / 100);

}

**RESULT:**

The desired output is obtained for the above code and executed correctly.