using System;

using System.Collections.Generic;

using System.IO;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace PFProjectFinal

{

internal class Program

{

static string[][] ch1;

static string[,] name = new string[32, 100];

static string[,] number = new string[32, 2];

static int[] num1 = new int[32];

static void Main()

{

int choice;

Console.WriteLine("\n\n\tBUS RESERVATION SYSTEM");

Console.WriteLine("\n\n[1] Login As Admin\n\n[2] Login As Passenger\n\n");

Console.Write("Enter your choice: ");

choice = int.Parse(Console.ReadLine());

switch (choice)

{

case 1:

Admin();

break;

case 2:

Passenger();

break;

}

if (choice > 2)

{

Console.Clear();

Console.WriteLine("\n Entered wrong input, Please enter correct one!");

Main();

}

}

static void PassengerLogin()

{

int a = 0;

string uname, pword;

string user = "admin";

string pass = "admin";

do

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\nPASSENGER LOGIN FORM");

Console.Write("\n\nENTER USERNAME: ");

uname = Console.ReadLine();

Console.Write("\nENTER PASSWORD: ");

pword = Console.ReadLine();

Console.WriteLine();

if (hihi(uname))

{

if (uname == user && pword == pass)

{

Console.WriteLine("\nWELCOME USER!!!!!");

Console.WriteLine("\n\nPress any key to continue...");

Console.ReadKey();

break;

}

else

{

Console.WriteLine("\nLOGIN IS UNSUCCESSFUL. PLEASE TRY AGAIN...");

a++;

Console.ReadKey();

}

}

else

{

Console.WriteLine("\n Your username contains numbers or invalid inputs! Press any key to try again.");

a++;

Console.ReadKey();

}

} while (a <= 2);

if (a > 2)

{

Console.WriteLine("\nSorry, you have entered the wrong username and password four times!!!");

Console.ReadKey();

}

Console.Clear();

}

static void AdminLogin()

{

int a = 0;

string passengerName, password;

do

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\nADMIN LOGIN FORM");

Console.Write("\n\nENTER USERNAME: ");

passengerName = Console.ReadLine();

Console.Write("\nENTER PASSWORD: ");

password = Console.ReadLine();

if (hihi(passengerName))

{

if (passengerName == password)

{

Console.WriteLine("\n\nWELCOME SIR/MAM!");

Console.WriteLine("\n\nPLEASE PRESS ANY KEY TO CONTINUE");

Console.ReadKey();

break;

}

else

{

Console.WriteLine("\n\nYOUR PASSWORD IS INCORRECT. PLEASE TRY AGAIN");

a++;

Console.ReadKey();

}

}

else

{

Console.WriteLine("\n Your username contains numbers or invalid inputs! Press any key to try again.");

a++;

Console.ReadKey();

}

} while (a <= 2);

if (a > 2)

{

Console.WriteLine("\nYOU CANNOT LOGIN. YOUR PASSWORD WAS INCORRECT");

Console.ReadKey();

}

Console.Clear();

}

static void Admin()

{

AdminLogin();

int num;

do

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\nMAIN MENU");

Console.WriteLine("\n[1] Create Bus Schedule\n[2] View Bus Schedule\n[3] View Customer Records\n[4] Back to Login Page\n[5] Exit");

Console.Write("\nENTER YOUR CHOICE: ");

num = int.Parse(Console.ReadLine());

switch (num)

{

case 1:

Schedule();

break;

case 2:

Bus();

break;

case 3:

Records();

break;

case 4:

Console.Clear();

Main();

break;

}

Console.ReadKey();

} while (num != 5);

Console.Clear();

Console.WriteLine("\n\nTHANK YOU FOR USING THIS BUS RESERVATION SYSTEM");

Console.ReadKey();

}

static void Passenger()

{

PassengerLogin();

int num;

do

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\nMAIN MENU");

Console.WriteLine("\n[1] View Bus List\n[2] Book Tickets\n[3] Cancel Booking\n[4] Bus Status Board\n[5] Back to Login Page\n[6] ROUTES\n[7] Exit");

Console.Write("\nENTER YOUR CHOICE: ");

num = int.Parse(Console.ReadLine());

switch (num)

{

case 1:

Bus();

break;

case 2:

Booking();

break;

case 3:

Cancel();

break;

case 4:

Status();

break;

case 5:

Console.Clear();

Main();

break;

case 6:

Console.Clear();

VRoutes();

break;

}

Console.ReadKey();

} while (num != 7);

Console.Clear();

Console.WriteLine("\n\nTHANK YOU FOR USING THIS BUS RESERVATION SYSTEM");

Console.ReadKey();

}

static void VRoutes()

{

StreamWriter sw = new StreamWriter("routes.txt");

ch1 = new string[6][];

ch1[0] = new[] { " Bus", " Route", " Time" };

ch1[1] = new[] { "1: Liyari Express", " Karachi to Lahore", " Departure time: 4:00am" };

ch1[2] = new[] { "2: Niazi Travellers", "Karachi to Hyderabad", "Departure time: 7:00am" };

ch1[3] = new[] { "3: Daewoo", " Karachi to Thatta", " Departure time: 8:00am" };

ch1[4] = new[] { "4: Fast Travellers", " Karachi to Shakhar", " Departure time: 10:00am" };

ch1[5] = new[] { "5: Faisal Movers", " Karachi to Punjab", " Departure time: 11:30am" };

for (int i = 0; i < ch1.GetLength(0); i++)

{

for (global::System.Int32 j = 0; j < ch1[i].Length; j++)

{

sw.Write(ch1[i][j] + " ");

}

sw.WriteLine();

sw.WriteLine();

}

sw.Close();

string routes = "C:/Users/glab/Desktop/BankManagmentSystem/hanitry/hanitry/bin/Debug/routes.txt";

try

{

string[] lines = File.ReadAllLines(routes);

foreach (string item in lines)

{

Console.WriteLine(item);

}

}

catch (FileNotFoundException)

{

Console.WriteLine("File not found: " + routes);

}

Console.ReadKey();

}

static void Bus()

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\nBus List: ");

for (int i = 1; i <= 5; i++)

{

Console.WriteLine("\nBus {0} Name: {1}", i, name[i, 0]);

Console.WriteLine("Bus {0} Number: {1}", i, number[i, 0]);

Console.WriteLine("Total number of seats: {0}", num1[i]);

Console.WriteLine("\n\n");

}

Console.ReadKey();

}

static void Booking()

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\n");

Console.Write("Enter Bus Number: ");

string busNo = Console.ReadLine();

int index = 0;

for (int i = 1; i <= 5; i++)

{

if (number[i, 0] == busNo)

{

index = i;

break;

}

}

Console.WriteLine("\n\n");

Console.Write("Enter number of seats to book: ");

int seat = int.Parse(Console.ReadLine());

if (seat <= num1[index])

{

num1[index] -= seat;

Console.WriteLine("\nBooking successful!!!");

Console.WriteLine("\nYour bus is: {0}", name[index, 0]);

Console.WriteLine("Bus Number is: {0}", number[index, 0]);

Console.WriteLine("Total number of seats available now: {0}", num1[index]);

}

else

{

Console.WriteLine("\nSorry, not enough seats available.");

}

Console.ReadKey();

}

static void Cancel()

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\n");

Console.Write("Enter Bus Number: ");

string busNo = Console.ReadLine();

int index = 0;

for (int i = 1; i <= 5; i++)

{

if (number[i, 0] == busNo)

{

index = i;

break;

}

}

Console.WriteLine("\n\n");

Console.Write("Enter number of seats to cancel: ");

int seat = int.Parse(Console.ReadLine());

if ((seat + num1[index]) <= 30)

{

num1[index] += seat;

Console.WriteLine("\nBooking canceled successfully!!!");

Console.WriteLine("\nYour bus is: {0}", name[index, 0]);

Console.WriteLine("Bus Number is: {0}", number[index, 0]);

Console.WriteLine("Total number of seats available now: {0}", num1[index]);

}

else

{

Console.WriteLine("\nInvalid! Maximum 30 seats are allowed.");

}

Console.ReadKey();

}

static void Status()

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\nBus Status Board: ");

for (int i = 1; i <= 5; i++)

{

Console.WriteLine("\nBus {0} Name: {1}", i, name[i, 0]);

Console.WriteLine("Bus {0} Number: {1}", i, number[i, 0]);

Console.WriteLine("Total number of seats: {0}", num1[i]);

Console.WriteLine("\n\n");

}

Console.ReadKey();

}

static void Schedule()

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\n");

Console.Write("Enter total number of Buses: ");

int n = int.Parse(Console.ReadLine());

Console.WriteLine("\n\n");

for (int i = 1; i <= n; i++)

{

Console.Write("\nEnter Bus {0} Number: ", i);

number[i, 0] = Console.ReadLine();

Console.Write("\nEnter Bus {0} Name: ", i);

name[i, 0] = Console.ReadLine();

Console.Write("\nEnter total number of seats: ");

num1[i] = int.Parse(Console.ReadLine());

Console.WriteLine("\n\n");

}

Console.ReadKey();

}

static void Records()

{

Console.Clear();

Console.WriteLine("\n\n\tBUS RESERVATION");

Console.WriteLine("\n\n");

Console.Write("\nEnter total number of Buses: ");

int n = int.Parse(Console.ReadLine());

Console.WriteLine("\n\n");

for (int i = 1; i <= n; i++)

{

Console.WriteLine("\nBus {0} Name: {1}", i, name[i, 0]);

Console.WriteLine("Bus {0} Number: {1}", i, number[i, 0]);

Console.WriteLine("Total number of seats: {0}", num1[i]);

Console.WriteLine("\n\n");

}

Console.ReadKey();

}

static bool hihi(string uname)

{

foreach (char item in uname)

{

if (char.IsDigit(item))

{

return false;

}

}

return true;

       }

    }

}