

CP Assignment 01

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Course: CP

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**Assignment N0. 01**

**Submission Due Date: 26-March-2023**

**Marks 05**

**Instructions (Any):** Submit soft copy on LMS

**Question#1 CLO2, PLO3, BTL3**

You are supposed to make a simple bus ticketing system by applying basic programming concepts such as loops /conational statements. Your system must show ticket prices for at least three routes. The application should have following properties

* Sow ticket prices for three different routes.
* If user wish to book a ticket, ask customer’s personal information such as name and NIC customer. Store name and NIC number in two different arrays. Name should be in string array and NIC should be in integer array
* If customer’s age is below 18 than he or she is not allowed to book a ticket else ask user to choose one route.
* After selection of route show its charges or ticket price to customer and ask for confirmation.
* If customer confirms than generate a ticket for that particular user.
* System must have option to search a specific customer by his/ her name and display its NIC number
* There must be an option to delete a specific customer

Code:

#include <iOStream>

#include <string>

using namespace std;

int main() {

char mainChoice, tiketBooking, routeChoice, bookingChoice,loopChoice;

string customerName, name[5], searchName, delName;

int CNIC[5],age, customerCNIC;

int i = 0;

bool flag, flag2 = false;

do

{

cout << "Press '1' to book a Ticket" << endl

<< "Press '2' to Search a customer" << endl

<< "Press '3' to Delete a customer" << endl;

cin >> mainChoice;

if (mainChoice == '1') {

cout << "Enter your age" << endl;

cin >> age;

if (age >= 18) {

do {

cout << "The Routes we are offering are:" << endl

<< "Route 1 --- Malir Halt to Gulshan-e-Iqbal (Ticket = 300rs)" << endl

<< "Route 2 --- Gulshan-e-Hadeed to DHA (Ticket = 450rs)" << endl

<< "Route 3 --- Stargate to Super Highway (Ticket = 200rs)" << endl;

cout << endl;

cout << "Press a to book ticket for Route 1" << endl

<< "Press b to book ticket for Route 2" << endl

<< "Press c to book ticket for Route 3" << endl;

cin >> routeChoice;

if (routeChoice == 'a') {

cout << "Enter your name:" << endl;

cin >> name[i];

cout << "Enter your CNIC no:" << endl;

cin >> CNIC[i];

cout << "The Ticket price for Route 1 is 300rs, Do you want to book ticket?" << endl

<< "Press 'y' for Yes and 'n' for No" << endl;

cin >> tiketBooking;

if (tiketBooking == 'y') {

cout << "Ticket Booked succesfully :)" << endl;

}

else {

cout << "No ticket booked " << endl;

}

}

else if (routeChoice == 'b') {

cout << "Enter your name:" << endl;

cin >> name[i];

cout << "Enter your CNIC no:" << endl;

cin >> CNIC[i];

cout << "The Ticket price for Route 2 is 450rs, Do you want to book ticket?" << endl

<< "Press 'y' for Yes and 'n' for No" << endl;

cin >> tiketBooking;

if (tiketBooking == 'y') {

cout << "Ticket Booked succesfully :)" << endl;

}

else {

cout << "No ticket booked " << endl;

}

}

else if (routeChoice == 'c') {

cout << "Enter your name:" << endl;

cin >> name[i];

cout << "Enter your CNIC no:" << endl;

cin >> CNIC[i];

cout << "The Ticket price for Route 3 is 200rs, Do you want to book ticket?" << endl

<< "Press 'y' for Yes and 'n' for No" << endl;

cin >> tiketBooking;

if (tiketBooking == 'y') {

cout << "Ticket Booked succesfully :)" << endl;

}

else {

cout << "No ticket booked " << endl;

}

}

else {

cout << "Invalid choice :(" << endl;

}

cout << "Press 'b' if you want to book anoter ticket (Press any other key to exit)" << endl;

cin >> bookingChoice;

i++;

} while (bookingChoice == 'b');

}

else {

cout << "You are not able to book a ticket as youre age is less than 18";

}

}

else if (mainChoice == '2') {

cout << "Enter the customers name you want to search for: " << endl;

cin >> searchName;

int j;

for ( j = 0; j < 5; j++) {

if (name[j] == searchName) {

flag2 = true;

cout << searchName << " found at index no " << j << ". The CNIC no of this " << CNIC[j] << endl;

name[j] = searchName;

}

}

if (flag2 == false) {

cout << "The customer you searched for doesn't exist" << endl;

}

}

else if (mainChoice == '3') {

int j;

cout << "Do you want to delete any customer:";

cin >> delName;

for (int i = 0; i < 5; i++) {

if (delName == name[i]) {

flag = true;

for (j = 0; j < 5-1; j++) {

name[j] = name[j + 1];

break;

}

}

}if (flag == false) {

cout << "Not found:";

}

else {

name[j + 1] = " ";

cout << "Customer deleted:";

}break;

}

cout << "Press y to return to the main menu (Press any other key to quit)" << endl;

cin >> loopChoice;

} while (loopChoice == 'y');

return 0;}

Output:





