

QUIZ 1

Problem

Write an *Object-Oriented Program* that allows users to manage passengers for a single bus with the plate “06 HUBM 06”.

The program should store the information about the passengers of this bus, such as name, surname, gender, his/her seat number, etc.

The menu of the program should be like this.

Menu

- 1-Book a seat
- 2-Cancel booking
- 3-Print all passengers
- 4-Print available seats
- 5-Print all seats
- 6-Search passenger
- 7-Exit



Create a ***Phone*** class with:

- Four attributes: countrycode, code (city or mobile operator), number (7 digits), type (home, office or mobile)
- Two constructor methods
 - One that receives all parameters
 - One that assigns countrycode +90 as default and receives other parameters
- Get / Set methods
- Display method

Create a ***Passenger*** class with:

- Attributes: name, surname, gender, *Phone* etc.
- One constructor method which receives all parameters
- Get / Set methods
- Display method

Create a ***Seat*** class with:

- Several attributes: int seatID, boolean status, *Passenger*
- One constructor method which receives all parameters
- Get / Set methods
- Display method

Create a ***Bus*** class with:

- Several attributes: plate, seatCount, *Seat[]* seats, etc.
- One constructor
- Get/Set methods
- *bookSeat (Passenger p, int seatID)* method
- *printAllPassengers()* method
- *printAllAvailableSeatIDs()* method
- *search* method
(search a passenger according to name surname and display his/her phone number)

Write a **main method** that

- Bus bus=new Bus("06 HUBM 06", 42);
- displays menu
- According to the user selection, the program should take parameters from the user and it should call related methods.

The menu of the program should be like this:

```
1-Book a seat
2-Cancel booking
3-Print all passengers
4-Print available seats
5-Print all seats
6-Search passenger
7-Exit
Enter your choose:
```

Sample output of program:

```
1-Book a seat
2-Cancel booking
3-Print all passengers
4-Print available seats
5-Print all seats
6-Search passenger
7-Exit
Enter your choose: 1
Enter seat id:5
Enter name:bahar
Enter surname:gezici
Enter gender:K
Enter country code:TR
Enter code:+90
Enter number:1234567
Enter type:MOBILE
```

```
Enter your choose: 3
Seat: 5 Status: Reserved
bahar gezici (K)
MOBILE Phone:TR +90 1234567
```

```
Enter your choose: 6
Enter name:bahar
Enter surname:gezici
bahar gezici (K)
MOBILE Phone:TR +90 1234567
```

If you try to book a seat that is already reserved, you need to give an error message:

```
Enter your choose: 1
Enter seat id:5
Enter name:bahar
Enter surname:gezici
Enter gender:k
Enter country code:90
Enter code:tr
Enter number:23456
Enter type:home
The seat has already reserved!
```

