

Palestine Polytechnic University
College of Information Technology and Computer Engineering
First Semester 2020-2021

Data Structures Projects
Submit before 05/12/2020
Teamwork of maximum 3 students

Instructions:

- Submit before the deadline. Any late submission will degrade your final grade.
- Submit a .cpp file through eclass.google.com.
- Do not submit links to anywhere outside the classroom.
- Any kind of plagiarism will such as working with students outside your team or having help from any person in writing part of the code will lead to having you fail in the project.
- After submitting the project there will be an interview with each team.

Details

Write a CPP program that manages the reservation of patient for a doctor

Here are some details:

- The doctor is available on Sun, Mon, Tue and Wed from 10:00AM to 12:00AM he is also available on Thu from 4:00pm to 8:00pm.
- Each reservation slot is 1 hour.
- If the reservation slot is free, the patient will write his or her name
- If the reservation is successful, the patient will receive a reservation number.
- The patient can see the available free reservation slots on a given day.
- The patient cannot make a reservation in a slot unless it is free.
- The patient can cancel a reservation if he/she wrote the reservation number correctly.
- The patient can ask about the reservation time if he/she wrote the reservation number correctly.
- This program does not end.

here are some scenarios:

```
Hello, if you wish to make a reservation, please press 1. If you wish to ask
about your reservation, please press 2: 2
please enter your reservation number: 1221
Hello Salem Abed.
Your reservation is on Wed at 11:00 am
Do you want to cancel it? (Yes/No): No
Thank you
```

```
Hello, if you wish to make a reservation, please press 1. If you wish to ask
about your reservation, please press 2: 1
please select a day (1-Sun, 2-Mon, 3-Tue, 4-Wed, 5-Thu): 3
On Tue you have time slots at 10 or 11 or 12
please enter the time: 11
please enter your name: Ali Ahmad
Thank you for making the reservation. Your id is 5653
```

Hello, if you wish to make a reservation, please press 1. If you wish to ask about your reservation, please press 2: **1**
please select a day (1-Sun, 2-Mon, 3-Tue, 4-Wed, 5-Thu): **3**
On Tue you have time slots at 10 or 12,
please enter the time: **11**
Sorry, this is not available
please enter the time: **12**
please enter your name: **Ali Ahmad**
Thank you for making the reservation. Your id is 5653

Hello, if you wish to make a reservation, please press 1. If you wish to ask about your reservation, please press 2: **2**
please enter your reservation number: **5653**
Hello Ali Ahmad.
Your reservation is on Tue at 12:00 am
Do you want to cancel it? (Yes/No): **Yes**
Your reservation is cancelled
Thank you

Hello, if you wish to make a reservation, please press 1. If you wish to ask about your reservation, please press 2: **2**
please enter your reservation number: **5653**
This number is wrong
Thank you

Hello, if you wish to make a reservation, please press 1. If you wish to ask about your reservation, please press 2
....
....
etc.

Good Luck