CSE212: SOFTWARE DEVELOPMENT METHODOLOGIES

YEDITEPE UNIVERSITY

SPRING 2023

ASSIGNMENT 1 – DUE DATE MARCH 3RD, 2023

Below, you can find the description of your first assignment. Additionally, you can also find the expected output of this assignment in the Application Walkthrough section.

As part of your assignment this semester, you are required to develop a <u>Hotel Reservation System</u>. Accordingly, for this week's assignment, you are expected to develop a system that creates a room reservation item and displays the information about the reservation, which also includes the overall amount due.

Accordingly, you are required to collect StandardRoom reservation data that includes *id*, *price* (per person) and *personCount* variables. All this information should be *int* type and shall be stored on a *multidimensional* array. Your application should also have a *displayInfo()* method which should make use of the *calculatePrice()* method to list all rooms and their overall due price. The overall price should be calculated using the *price* per person and multiplying with *personCount*.

The reservation *id* variable must increment automatically for each reservation; which should indicate the room numbers assigned.

You should create few StandardRoom's and show their information and the total number of rooms created by implementing a menu as below;

- 1. Create new Standard Room
- 2. Display all room information
- 3. Display the total number rooms
- 0. Exit

PS: You can use basic C-style arrays.

Application Walkthrough

```
1. Create new Standard Room
2. Display all room information
3. Display the total number rooms
0. Exit
Person Count: 2
Price: 50
Room #1 created!
1. Create new Standard Room
2. Display all room information
3. Display the total number rooms
0. Exit
Person Count: 3
Price: 40
Room #2 created!
1. Create new Standard Room
2. Display all room information
3. Display the total number rooms
0. Exit
Room #1 has 2 people with a price total of $100.
Room #2 has 3 people with a price total of $120.
1. Create new Standard Room
2. Display all room information
3. Display the total number rooms
0. Exit
2 rooms have been created so far.
1. Create new Standard Room
2. Display all room information
3. Display the total number rooms
0. Exit
0
```

Submit your assignment folder in a zip file [\underline{no} class files will be marked], which has your student number as name, through the YULEARN ($\underline{https://yulearn.yeditepe.edu.tr}$) latest by the end of Friday, March 3^{rd} , 2023.