CSE212

SOFTWARE DEVELOPMENT METHODOLOGIES

FALL 2022

LABWORK 2 – SECTION 1

Below, you can find the description of your labwork for today. You can also find the expected output of this code in the Application Walkthrough section.

You are going to improve your Theather Reservation and Ticketing System on top of previous week's labwork.

You are going to create a *Ticket* class, that includes following variables:

Variable Name	Type
play	Play
audienceName	String
seatNumber	String

To this purpose, you are required to achieve constructor overloading. In other words, You should have two constructors; one with two parameters **(audienceName and play)**, and three parameters **(audienceName, play and seatNumber)**.

You should implement a menu as below;

1. Create new Play
2. Buy a Ticket
3. Buy a Ticket with seat number
4. Display all Tickets
0. Exit

Hint 1: Create another basic array to store Ticket objects.

Hint 2. When creating Ticket objects, you should search the Play array to find a Play with a given name at the 2nd menu option.

Application Walkthrough

```
1. Create new Play
2. Buy a Ticket
3. Buy a Ticket with seat number
4. Display all Tickets
0. Exit
1
```

Event Name: Macbeth
Start Time: 20:00
Date: Oct 20 2022
Duration (in hours): 2

Play created!

1. Create new Play
2. Buy a Ticket
3. Buy a Ticket with seat number
4. Display all Tickets
0. Exit
2

Audience Name: Bob
Event Name: Macbeth

Play found!
Ticket is purchased!

1. Create new Play
2. Buy a Ticket
3. Buy a Ticket with seat number
4. Display all Tickets
0. Exit
3

Seat Number: A1
Audience Name: Alice
Event Name: Macbeth

Play found!
Ticket is purchased with seat number A1!

1. Create new Play
2. Buy a Ticket
3. Buy a Ticket with seat number
4. Display all Tickets
0. Exit
4

Bob is going to Macbeth which starts at 20:00 on Oct 20 2022 and ends at
22:00
Alice is going to Macbeth which starts at 20:00 on Oct 20 2022 and ends at
22:00 with seat number A1.

1. Create new Play
2. Buy a Ticket
3. Buy a Ticket with seat number
4. Display all Tickets
0. Exit
0