TEST SUITE + COMPLIANCE REPORT

STUDENTS AUDITORIUM MANAGEMENT SYSTEM (SAMS)

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WHITE BOX TESTING

Seat Class

Method	Expected input	Object which it is called on	Expected Output	Actual Output
__init__(int, string)	(12, ’Balcony’)		Constructs a Seat class object without any error	Expected Output
print( )		seatNumber: 12 seatType: ‘Balcony’	Prints “Seat Number 12, Seat Type: Balcony”	Expected Output
allot(int)	100	transactionID: None allotmentStatus: False	Changes allotmentStatus to True and returns True	Expected Output
allot(int)	101	transactionID: 100 allotmentStatus: True	Returns False	Expected Output
isAvailable()		allotmentStatus: True	Returns False	Expected Output
isAvailable()		allotmentStatus: False	Returns True	Expected Output
cancel( )		transactionID: 100 allotmentStatus: True	Changes allotmentStatus to False, transactionID to None and returns True	Expected Output
cancel( )		transactionID: None allotmentStatus: False	returns False	Expected Output

Show Class

Method	Expected Input	Object which it is called on	Expected Output	Actual Output
__init__(datetime, datetime, string, int, int, int, int)	(2021-03-26,2021-03-27,”TestShow”,90,10,500,1000)		Constructs a Show object without any error	Expected Output
__init__(datetime, datetime, string, int, int, int, int)	(2021-03-27,2021-03-26,”TestShow”,90,10,500,1000)		Print invalid dates error message	Expected Output
showAvailableSeats()		All normal seats booked, all balcony seats available	Returns list of all balcony seats	Expected Output
showAvailableSeats()		All balcony seats booked, all normal seats available	Returns list of all normal seats	Not Tested
percentageOccupied()		All normal seats booked, all balcony seats available	Returns 10	Expected Output
percentageOccupied()		All balcony seats booked, all normal seats available	Returns 90	Not Tested

Auditorium Class

Method	Expected Input	Object which it is called on	Expected Output	Actual Output
__init__( )			Constructs an auditorium object with an empty list of shows	Expected Output
addShow(Show)	A valid show object with name "TestShow"	Auditorium with empty shows list	Adds given show to the list of shows and returns True	Expected Output
addShow(Show)	A show with times that intersect with times for the "TestShow" show	Auditorium with show list with one show "TestShow"	Returns False	Expected Output
findShow(string)	"TestShow"	Auditorium with show list with one show with name "TestShow"	Returns List with one show	Expected Output
findShow(string)	"TestShow 2"	Auditorium with show list with one show with name "TestShow"	Returns empty list	Expected Output

Transaction Class

Method	Expected Input	Object which it is called on	Expected Output	Actual Output
__init__(int, int, string, datetime)	(130, 100, “Booking”, 2021-03-26)		Constructs Transaction object with given values	Expected Output
__init__(int, int, string, datetime)	(-130, 101, “Cancellation” , 2021-03-26)		Constructs Transaction object with given values	Not Tested
print( )		(130, 100, “Booking”, 2021-03-26)	Prints: Transaction ID: 100 Booking Amount (Credited): 130 Date: 2021-03-26	Expected Output
print( )		(-130, 100, “Cancellation” , 2021-03-26)	Prints: Transaction ID: 101 Booking Amount (Credited): -130 Date: 2021-03-26	Not Tested

Ledger Class

Method	Expected Input	Object which it is called on	Expected Output	Actual Output
__init__()			Constructs Ledger object with an empty transaction dictionary	Expected Output
addExpense(string, int, datetime)	("Electricity", 13000, 2021-03-26)	Empty transaction dictionary	Creates a transaction with ID 0 and given details and adds it to the dictionary	Expected Output
printTransactions(int [ ])	[0]	Transaction dictionary with one transaction object ("Electricity", 13000, 2021-03-26)	Returns Transaction list with one transaction: "Electricity", 13000, 2021-03-26	Expected Output
printTransactions(int [ ])	[4,5]	Transaction dictionary with one transaction object ("Electricity", 13000, 2021-03-26)	Prints Error Message	Error message printed to console

Employee Class

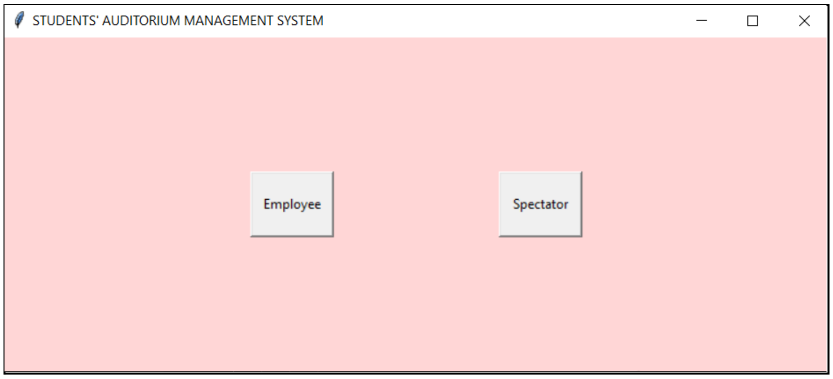
Method	Expected Input	Object which it is called on	Expected Output	Actual output
__init__(int, string)	(1,”Pass1”)		Constructs Employee object	Expected Output
__init__(int, string)	(“invalid string”,”Pass 1”)		Prints Error message and does not create any instance of Employee class	Constructs an Employee object without any error

Salesperson Class

Method	Expected Input	Object which it is called on	Expected Output	Actual Output
__init__(int, string, int)	(1,”Pass1”,1000)		Constructs SalesPerson object with commission initialised to 0 and an empty integer list	Expected Output
__init__(int, string)	(“invalid string”,”Pass 1”,500)		Prints Error message and does not create any instance of SalesPerson class	Constructs a Sales Person object without any error
addTransaction(int)	3	(1,”Pass1”,1000)	Adds 3 to list of transaction IDs	Expected Output

GUI TESTING

Home Page



Input:

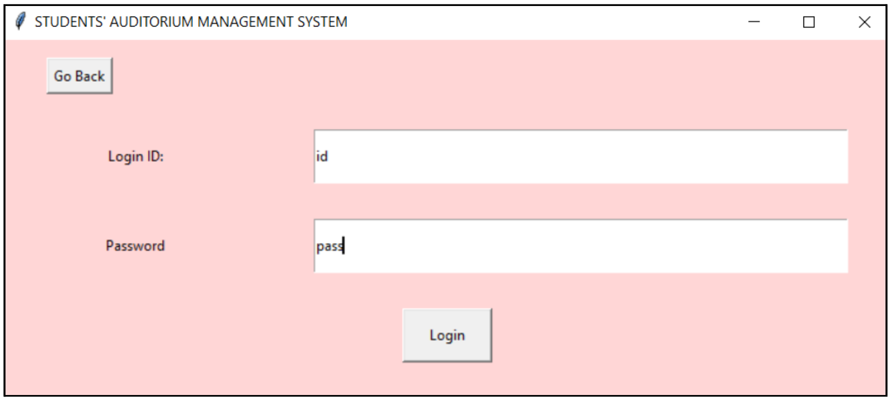
Select whether the user is an employee or a spectator.

Output:

If ‘Employee’ is selected, the user is redirected to the Employee Login Page.

If ‘Spectator’ is selected, user can view the Spectator interface

Login Page



Login ID: id

Password pass

Input:

Takes in Employee ID and password of the employee.

Expected Output:

Users should be able to login successfully on providing correct login details.

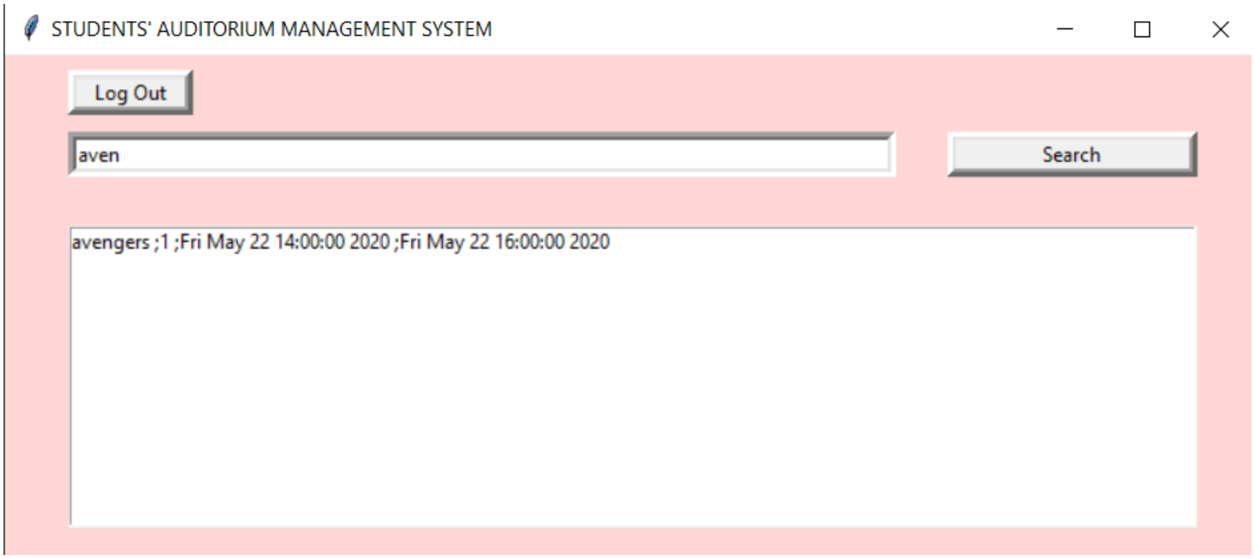
Effective Result:

If the Employee ID and password are valid, the employee is redirected as per their role.

If Employee ID and/or password are incorrect an error message is displayed in the console.

Salesperson Menu

Input:



aven

```
avengers ;1 ;Fri May 22 14:00:00 2020 ;Fri May 22 16:00:00 2020
```

Enter show name to search in text field

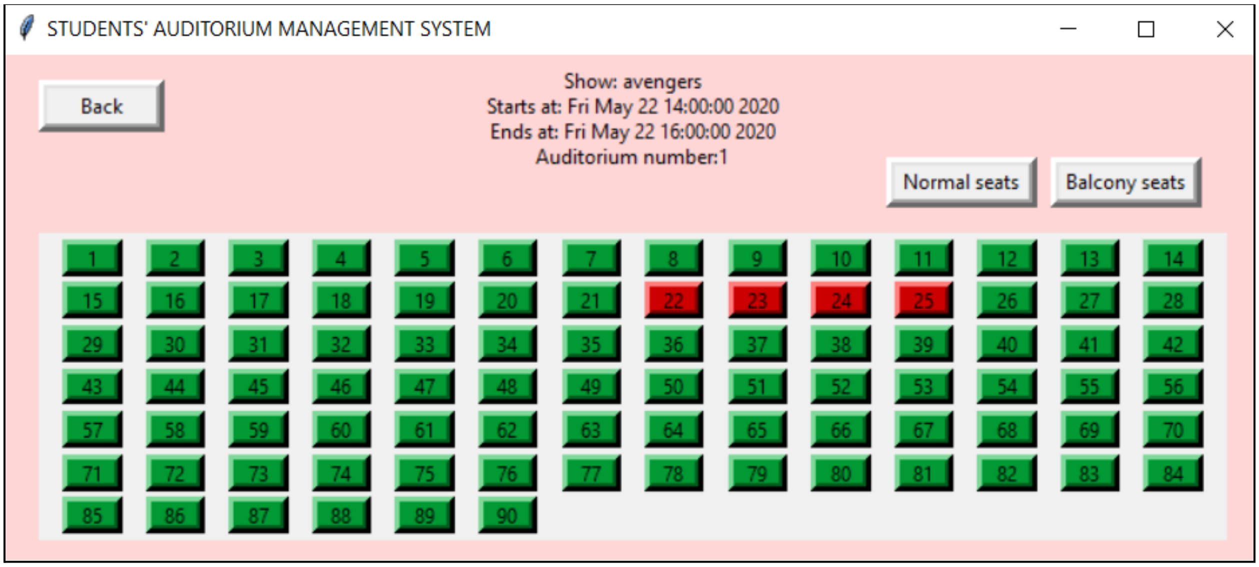
Expected Output:

Prints a list of all shows that match. Salespersons can select a show to perform further operations on it.

Effective Result:

If the show name field is left empty, the system will print a list of all shows available. Otherwise, the software will print all matching shows in the management system.

Book/Cancel Menu



STUDENTS' AUDITORIUM MANAGEMENT SYSTEM

Show: avengers
Starts at: Fri May 22 14:00:00 2020
Ends at: Fri May 22 16:00:00 2020
Auditorium number:1

Input:

Select Seat Number to be booked/cancelled. Salesperson must choose the desired seat.

Expected Output:

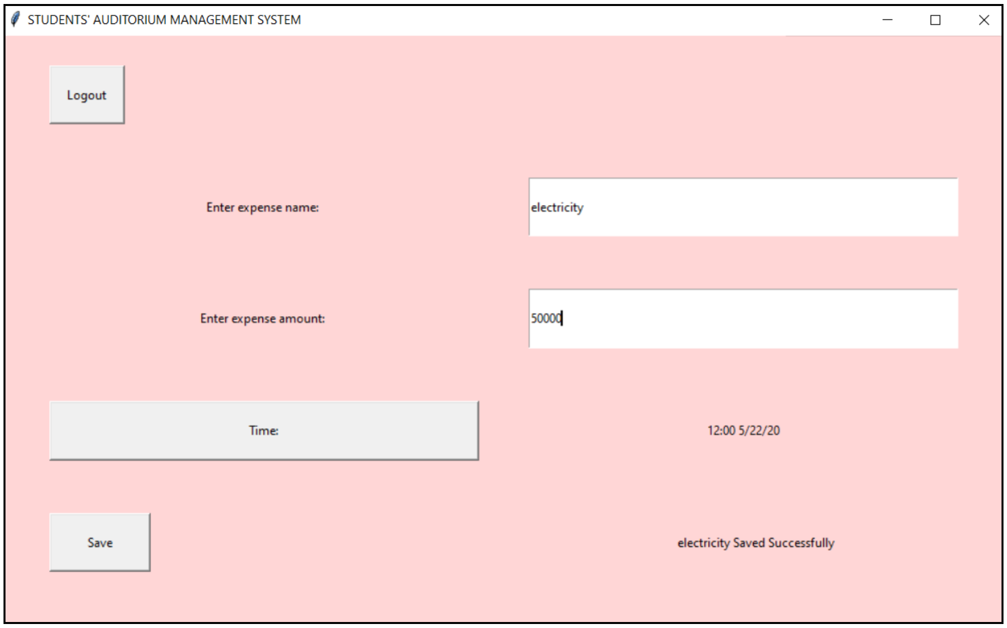
In case of Book, a booking message appears on the screen.

Effective Result:

If an available seat is booked, a booking message appears.

If an already booked seat is selected, it is cancelled.

Audit Clerk Menu



Enter expense name: electricity

Enter expense amount: 50000

Time: 12:00 5/22/20

electricity Saved Successfully

Input:

Enter name, date and amount of expense incurred.

Expected Output:

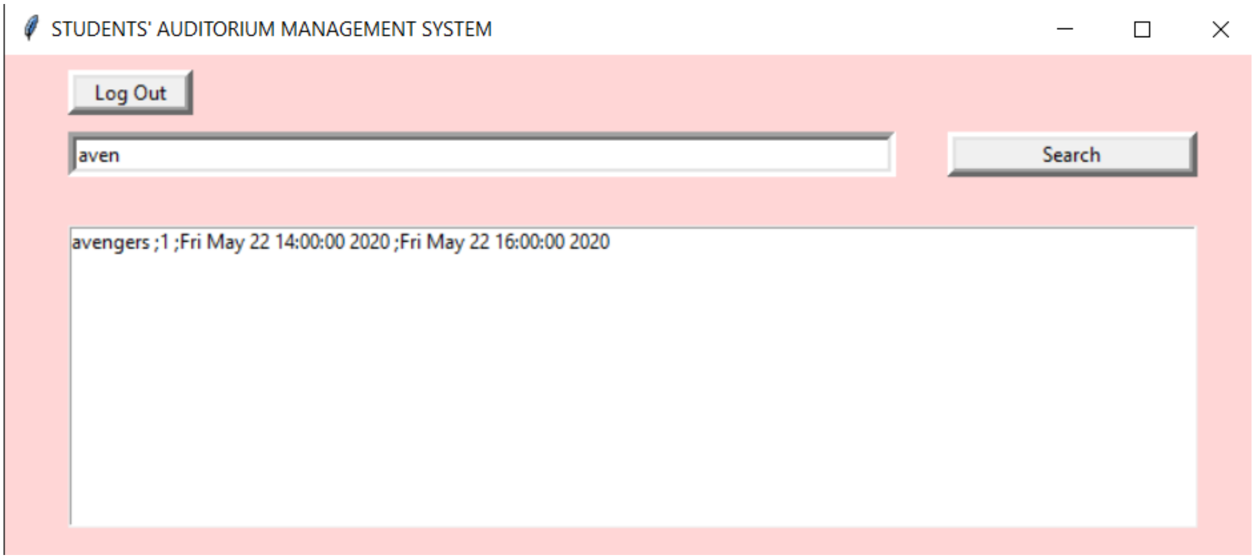
Transaction gets added to the system and a success message is displayed.

Effective Results:

All results match the expected results.

Spectator Menu

Input:



aven

```
avengers ;1 ;Fri May 22 14:00:00 2020 ;Fri May 22 16:00:00 2020
```

Enter show name to search in text field

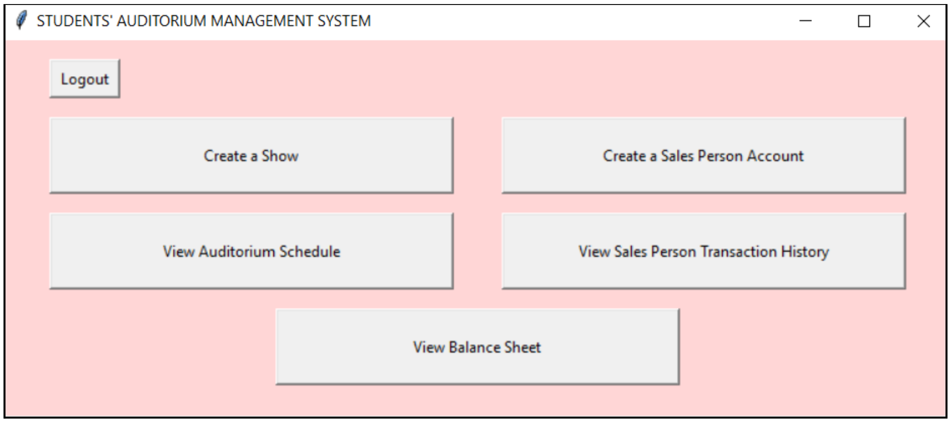
Expected Output:

Prints a list of all shows that match. Spectator can select a show to view availability.

Effective Result:

If the show name field is left empty, the system will print a list of all shows available. Otherwise, the software will print all matching shows in the management system

Show Manager Menu


STUDENTS' AUDITORIUM MANAGEMENT SYSTEM
Logout
Create a Show
Create a Sales Person Account
View Auditorium Schedule
View Sales Person Transaction History
View Balance Sheet

The Show manager after logging in successfully from the home interface can perform several functions like:

View Auditorium schedule

Create shows

Add salespersons to the system

View transactions performed by each salesperson

The show manager can also access the balance sheet which displays all the sales and expenditures for the year.

View transactions

Input:

Select salesperson from a list of all salespersons.

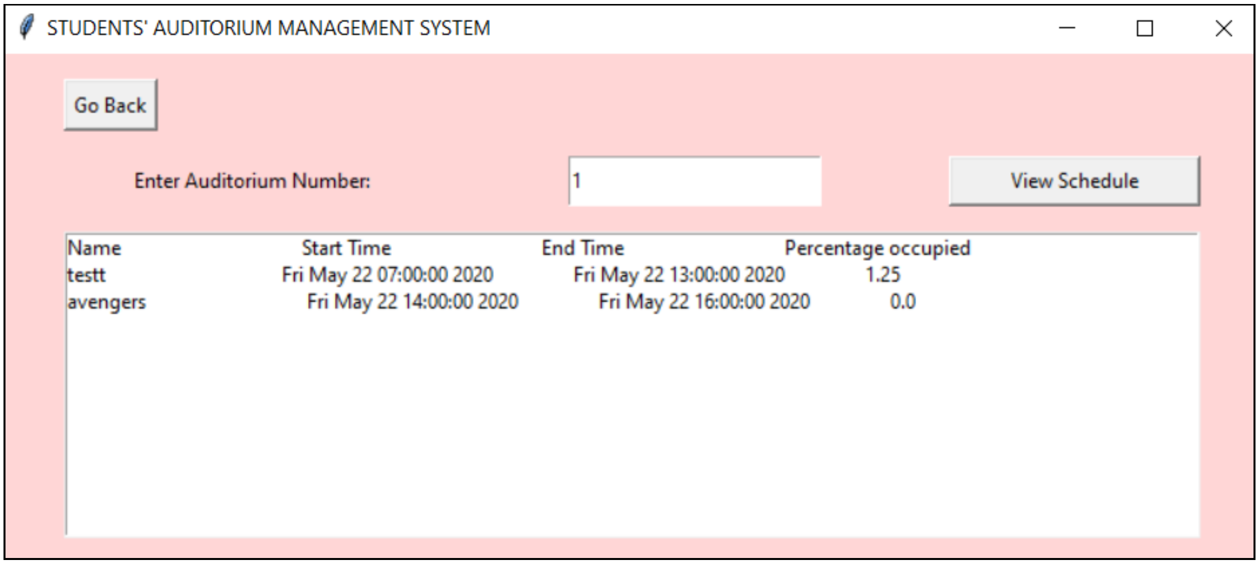
Expected Output:

The transactions performed by the selected salesperson are displayed.

Effective Results:

All results match the expected results.

View Auditorium Schedule

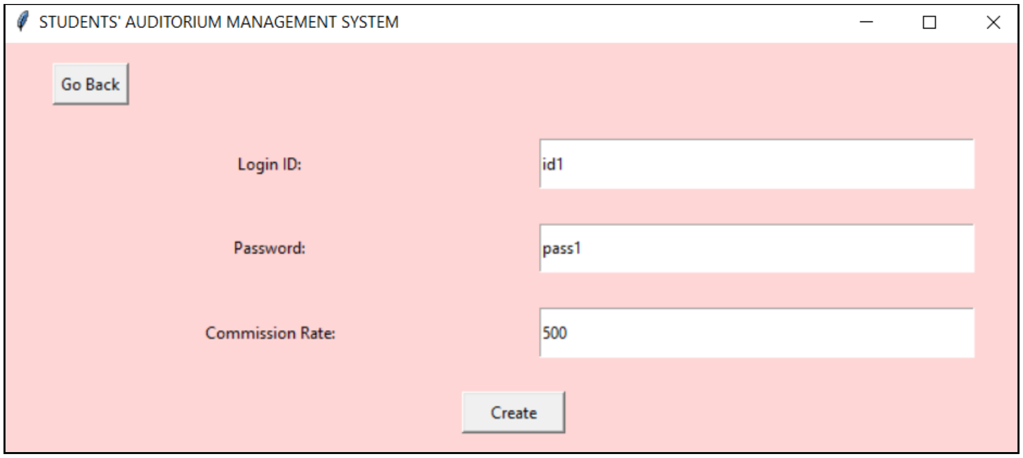


Enter Auditorium Number: 1

```
Name                    Start Time              End Time                Percentage occupied
testt                 Fri May 22 07:00:00 2020    Fri May 22 13:00:00 2020        1.25
avengers                Fri May 22 14:00:00 2020    Fri May 22 16:00:00 2020        0.0
```

A list of shows is displayed with their respective percentage occupancies.

Add Salesperson Menu



Login ID: id1

Password: pass1

Commission Rate: 500

Input:

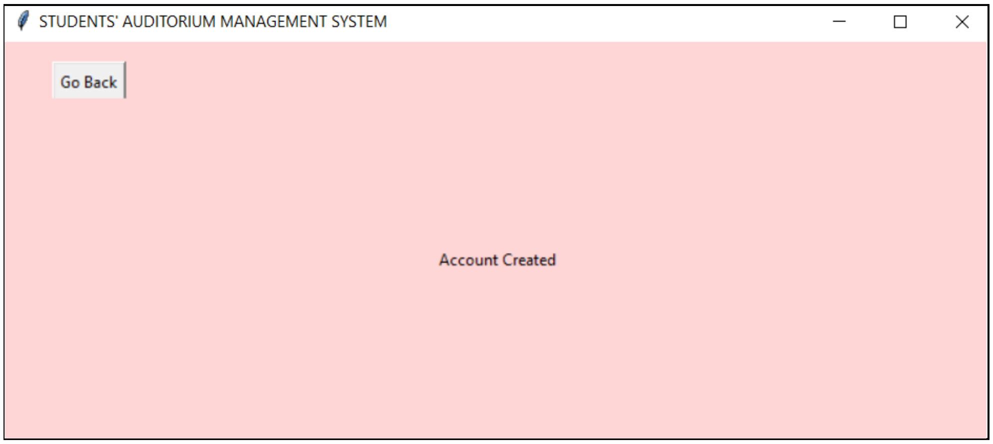
A valid Employee ID is entered. If accepted,commission rate and password are entered.

Expected Output:

Salesperson gets added to the system and a success message is displayed.

Effective Results:

If the Employee ID has already been assigned to an employee, an error message will be displayed. Otherwise, a new salesperson is added to the system.



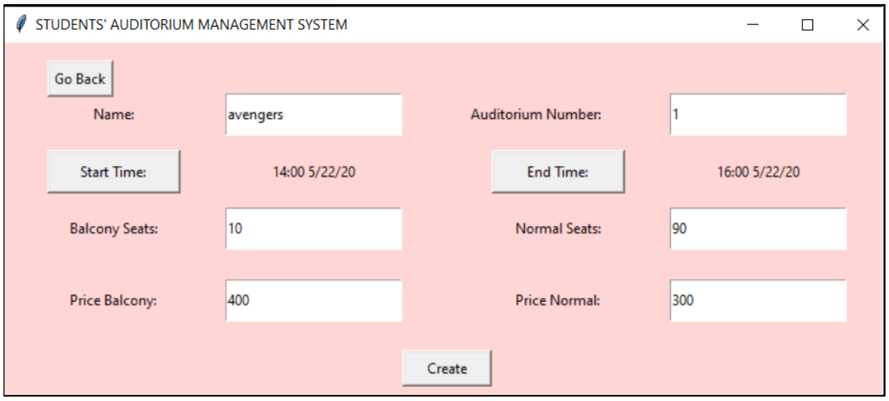
Account Created

View Balance Sheet

The balance sheet is displayed with revenues generated for each show and expenses incurred for that year.

Add Shows Menu

Input:



Name: avengers

Auditorium Number: 1

Start Time: 14:00 5/22/20

End Time: 16:00 5/22/20

Balcony Seats: 10

Normal Seats: 90

Price Balcony: 400

Price Normal: 300

A valid Start time, end time, auditorium number and name are entered. Then prices and the number of different types of seats are entered.

Expected Output:

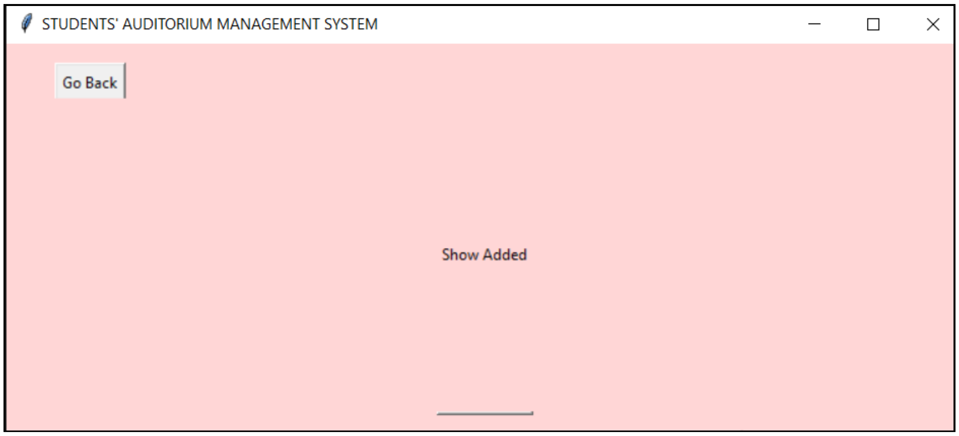
Show gets added to the system and a success message is displayed.

Effective Results:

If start time is greater than end time an appropriate error message is displayed.

If the auditorium is already booked at that given slot, an error message is displayed.

If there already exists a show by the same name at that time in the same auditorium, another error message is displayed to avoid duplicates.
Otherwise the show gets added to the system successfully.



Show Added