

CSE212
SOFTWARE DEVELOPMENT METHODOLOGIES
SPRING 2017
LABWORK 2 - SECTION 1

You are required to improve your previous application that you wrote in Labwork 1. For this purpose, you are going to implement a more complex Bus Reservation System.

There must be three different **Bus** classes.

1. The **SimpleBus** class should have a data structure holding 40 seats which has 10 rows having 4 seat per row.
2. The **LuxuryBus** class has 20 seats in 10 rows.
3. The **DoubleDecker** class has 60 seats, in the 1st floor there are 5 rows with 4 seats per row, and in the 2nd floor there are 10 seats with 4 seats per row. (You can define this data structures as static variables of the related class)

Your menu should consist of two options, Reserve and Cancel. You are going to abandon int array seat reservation sytle. You should change your reservation system such that when Reserve option is selected, the user should enter the bus type and the seat number. You should create a **Bus** object with these information. The bus type and the seat no will be stored in your original **Bus** class with a class variable, and the seat information will be changed in the data structure of the selected class. You can store the reserved Bus objects in a data structure.