Object-Oriented Programming in Java
MISM/MSIT 95-712

Project 5

1. (70 points) Design and implement a JAVAFX or JavaFX FXML based GUI for the Cruise Management system you developed in Assignment 4 question 1. All of the functionality of the Cruise Management System should still be available through the GUI. Your GUI must include at least 1 chart from the JavaFX charts.

2. (30 points) The following is a skeleton for a class named InventoryItem . Each inventory item has a name and a unique ID number:

```
class InventoryItem
{
     private String name;
     private int uniqueItemID;
}
```

Write appropriate set/get/constructor methods. The uniqueItemID 's are assigned by your store and can be set from outside the InventoryItem class—your code does not have to ensure that they are unique. Next, modify the class so that it implements the Comparable interface. The compareTo() method should compare the uniqueItemID 's. For example, the InventoryItem with item ID 5 is less than the InventoryItem with ID 10. Test your class by creating an array of sample InventoryItem 's and sort them using a sorting method that takes as input an array of type Comparable. Finally demonstrate object serialization by saving sample InventoryItem objects to a file and reading InventoryItem from the same file.

Submission

Submit as usual on Canvas. Demonstrate the solutions to the TA.