

Final Hands-On TEST - Wednesday, April 16, 2014

Student: _____

Be sure to read the following general instructions carefully:

- This lab test must be completed individually by all the students.
- Save your program periodically just in case that your PC crashes.

Exercise 1

Start a new Eclipse Java project. Name the project:

YourFullName_CXEC320FinalTest. For example: JohnSmith_CXEC320FinalTest.

DO NOT create a package in this project. Let Eclipse create the default package.

Write a GUI application in Java that helps organizers to keep track of **Java One** conferences. The minimum information that is required is shown in the following picture:

The user should be able to enter the *sponsor name* of Java One conference, *date*, *number of participants*, and *location*. The information should be displayed in a JTextArea component which has scrolling abilities, and at the same time should be stored in a file in serialized form (whenever user clicks on button Enter).

Date	Participants	Sponsor	City
10/10/2014	1200	Oracle/IBM	San Francisco
10/10/2015	1300	Google/RedHat	New York

You will need to create the following classes:

ConferenceInfo - to encapsulate the information (*String date, int nrOfParticipants, String sponsor, String city*). Provide the necessary *constructors* and *setter/getter* methods for this class.

DataInfo - to encapsulate input/output capabilities. This class will define the following methods:

```
public static void openFile()
public static void addRecords(ConferenceInfo info)
public static void closeFile()
```

Use **FileOutputStream/ObjectOutputStream** to create the file, save a record, and close the file.

ConferenceGUI - implements the GUI shown above and interacts with **ConferenceInfo** and **DataInfo** classes to store conference the information in the file.

Use the most appropriate layout manager classes to implement the layout of this GUI. Provide validation for user input.

Bonus marks (5): Allow the user to exit the application by clicking on File/Exit menu item, and use a GridbagLayout manager to implement the UI.

Evaluation:

1. OOD	- 15 marks
2. GUI	- 20 marks
3. Java APIs	- 20 marks
4. Exception Handling/Validation	- 10 marks
<u>5. User friendliness</u>	<u>- 5 marks</u>
Total	- 70 marks

You should submit the entire project using **Assignment link** on Blackboard **immediately after demonstration.**