# Seneca College

Applied Arts & Technology SCHOOL OF COMPUTER STUDIES

JAC444 Submission date:31-07-2022 Date:23-07-2022

### Workshop 8

Workshop Header (to be included with every file)

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Workshop #

Course:<subject type> - Semester Last Name:<student last name> First Name:<student first name>

ID:<student ID>

Section: <section name>

This assignment represents my own work in accordance with Seneca Academic Policy.

Sianature

**Date:**<submission date>

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#### Code Submission Criteria:

Please note that you should have:

- Appropriate indentation.
- Proper file structure
- Follow java naming convention
- Document all the classes properly
- Do Not have any debug/ useless code and/ or files in the assignment

#### **Deliverables and Important Notes:**

### All these deliverables are to be uploaded on the blackboard once done.

- You are supposed to create video of your running solution for each task along with demo. It should include voice over explaining the logic and code. You can use diagram like flow charts to aid your explanation. (40%)
  - o Screen Video captured file should state your last name and id, like Ali\_123456.mp4 (or whatever the extension of the file is)
- A word/ text file which will reflect on learning of your concepts or any new class in this workshop. Also include the instructions on how to run your code. (30%)

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o Should state your Full name and Id on the top of the file and save the file with your last name and id, like Ali 123456.txt

- Submission of working code. (30%)
- Make sure your follow the "Code Submission Criteria" mentioned above.
- You should zip your whole working project to a file named after your Last Name followed by the first 3 digits of your student ID. For example, Ali123.zip. If the zip file is too large to upload on BB, you can upload the video portion on Jac444-NBB team under files/workshop submission/w01
- Your marks will be deducted according to what is missing from the above-mentioned submission details.
- Late submissions would result in additional 10% penalties for each day or part of it.
- Remember that you are encouraged to talk to each other, to the instructor, or to anyone else about any of the assignments, but the final solution may not be copied from any source.

#### **Academic Policies:**

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### **Description:**

The following workshop lets you practice basic java coding techniques, creating classes, methods, using arrays, Java I/O, inheritance, polymorphism, Exceptional Handling, JavaFx (GUI), Inner and Anonymous Classes, Lamda Expression, Java Collection Frame.

### Task 1

Develop a program to maintain Travel Diary that consist of travel entries.

- Each travel entry logs a Country that user visited, start and end date of travel.
- Under each Country, maintain list of cities that user travelled to.
- Each City consists of City Name, Visit dates (within the travel date), BnB, list of places visited (e.g. Niagara Falls, Niagara on Lake Park), Description (e.g. Loved the food, awesome weather, poor public transport service) and Rating [1(low) -5 (high)].
- The program should be able to list the country and under each country, cities user have visited.
- User should be able to add travel to log. The dates should be unique.
- The user should be able to add multiple countries in one travel.
- User should be able to add multiple cities in city list. The program should indicate if city already exist within one travel.
- The program should be able to provide operations like filter cities which has highest rating. Search details of travel of city or country, Display details of particular travel like City name, travel dates, no of days, Description and Rating.

Use Java Collection Framework efficiently to main the travel diary. The output should be GUI based with proper Header and Menu. Exceptions should be handled for duplicate data. Input validations should be in place. You can use multiple windows for showing different results. Grading will also be based on use of appropriate collection class, GUI, validations, and exception handling (wherever required).

**Optional:** travel entry can also contain list of image files urls (file path) that can be browsed using Image viewer. The program asks to select country and shows all pictures. User provides at the time of creating Travel Entry, the images file paths.

User can also mark some travel as favorite and can list favorites.