

Seneca College

Applied Arts & Technology
SCHOOL OF COMPUTER STUDIES

JAC444

Submission date:24-07-2022

Date:17-07-2022

Workshop 7

Workshop Header (to be included with every file)

/*****

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.

Signature

Date:<submission date>

*****/

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 you 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.

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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

Task

The details for the task are as follows,

- The World Development Indicators for multiple countries for year 2011-2021 is downloaded from <https://databank.worldbank.org/source/world-development-indicators#> and stored in csv file attached.
- Each file contains indicators head and the country value for each year. The indicator will tell whether the value is in % or in terms of US\$. For example, “Adjusted savings: education expenditure (% of GNI)” is in %. The indicators with no values are indicated as .. (2 DOTS).
- Each line contains Country Name, Series Name and years. All are comma separated. (For simplification some columns are removed).

Write a program that:

- asks the user to enter the year or select year, country, and indicator (this should be selected using combo) and displays value.
- If value is not available a suitable msg should be displayed.
- User should be able to select or enter at least one inputs and details should be displayed accordingly e.g. if user select Canada, then All relevant details should be displayed.
- Proper UI title should be used, and UI design should be symmetric, and all nodes properly aligned. IO class should be sperate.

You can use any Javafx control to input info such as Text Box or dropdown or radio button and text or table view or list view to display details. Suitable message should be displayed if search is unsuccessful. You can use Anonymous classes/ Lamda expression where needed.