BIRZEIT UNIVERSITY

COMP231 – Advanced Programming
Assignment # 4

Deadline: 17/12/2019 before 11:59 pm.

Objectives:

١. To understand advanced problem solving techniques using Java Programming Language.
٢. To construct JavaFX form with appropriate UI controls. Also to obtain input and events from user
٣. To apply exception handling and File IO

Program Specifications

Suppose you are asked to write a complete Java program, which will display a user interface (UI) using JavaFX to collect student information. The student information collected should be as follows:

- Student number

- First name

- Last name

- Address

- Tawjihi grade

- Gender (male or female)

- And department name (computer science, computer engineering, civil engineering, or architectural engineering)

Note: You should create a student class to represent the above student information.

When your program is started, it should display a JavaFX form that enables user to enter above student information. The JavaFX form should contain **at least one** of the following JavaFX controls:

- Text Fields

- Radio boxs

- Combo Boxes

- Labels

- And a "Save" Button

In addition, your layout should consist of at least **two different panes,** for example: BorderPane and GridPane.

==Note: Use your own understanding to construct the appropriate JavaFX form. Feel free to design the form you want. But keep in your mind that it should contain the above JavaFX controls.==

When the user enters all required information, he/she will click on "Save" button. When "Save" button is clicked, your program will create, a Student object and fills it with data entered by user. Your program will then call a special method that will save the student information in a **student_info.txt** file.

Please note the following:

1. Your program should catch appropriate exceptions and display an appropriate message to user.

2. Make sure that your program is well-documented using Java standard documentation guidelines.

3. Your are free to choose any Layouts you want. ==Thus, we will assume that no two students' UI will look the same!==

4. The output file (student_info.txt) should be located at special folder named "**files**" at root of your project.