JavaFX and Scene Builder Practice

Objective

The objective of this practice is to understand the basic principles of creating user interfaces, as well as to develop small projects based on provided examples, using Scene Builder and JavaFX.

Instrucciones

1. Practice is individual.
2. The activity is expected to last 1.45 hours; however, the following class after the seminar will be left for submission.
3. Each member will be rated from 1 to 10, and the average score obtained by all team members will add up to 5% extra to the final grade that the group receives for the delivery of the Preliminary Project, Product Backlog, and Mockups.
4. It consists of two parts, each based on a sample project provided in class, and with 2 activities of the same style.

First part: HelloWorld

The material provided for this first part is the HolaMundo project (which you should download, unzip, and open in Intellij IDEA), the explanation can be found in the presentations.

1. [2/10]. After attending class and reviewing the presentations, you should comment on the classes HelloMain.java, ControllerView.java, and ControllerNew.java, which are located in src\main\java\com.example.helloworld. Include as many comments as you deem necessary to explain the purpose of each class, what each object created is, and what each function does.

2. [3/10]. Starting from the example project, create a copy of it and make the necessary changes so that:
   a. The project is organized with the Model-View-Controller pattern..
   b. All elements in hello_view and new_window should be centered. Additionally, rename both fxml files to my_view and my_new_Window.
   c. In ControlallerView.java, a validation should be made for the variable texto so that, if it is empty (""), instead of opening my_new_window, a message should be written on a label (which you should add to the window) that says 'Please write something' and it should be displayed in red.

Second part: Login

The material provided for this first part is the Login project (which you should download, decompress, and open from IntelliJ IDEA).

1. [1/10]. After having been in class and reviewing the presentations, answer the following questions:
   a. Describe the process to follow to create the controller for a window, when you already have the user interface completed.
   b. How could he/she make the window maintain a fixed size and prevent the user from changing its dimensions?
   c. What is the purpose of the style.css file?
   d. ¿ What advantages would you say there are in using CSS compared to editing the style of the elements from the options in the Scene Builder?

2. [4/10]. Starting from the example project, create a copy and make the necessary changes so that:
   a. The project is organized using the Model – View – Controller pattern.
   b. The Login button should have an onAction that opens a new welcome window for the application (you will need to create it, be as original as possible).
   c. Add a button to recover password in the login.fxml file and when clicking on it, a new window opens with a textField to enter an email and a button that says send (follow the style of the window created in section b). You do not have to develop any functionality in the controller of this window, just opening it and having the requested elements is enough.