Smart Building Lab1 : displaying excel charts into a C# program

The aim of this lab is to connect an excel file containing some weather information and a C# program that displays and modifies some parts of the excel file. Some values of the data are given by the user. In the next lab, the values written in the excel file will be loeaded from a Web Service.

To begin

1. Unzip « smart_building_lab1 » somewhere on your computer
2. Open the « smart-building-lab1 » solution
3. Open the class Form1.cs and change the value of the String path to the concrete path where you saved the file on your computer
4. Run the solution : change the value of the temperature in Caille, click the update button and check if the chart is modified (this requires a little bit waitClose the execution window by clicking on the cross at the right upper corner of the window.
5. Quit visual studio
6. Open the excel file and check that it also has been modified.

Warning : if you stop your program in emergency or without closing the window properly, an excel will still be running. You must kill the excel process running on your computer.

7. Open the .xls file.
8. Add a city and a temperature in the « temperature example » sheet
9. Modifies the chart in order to include this new data. You can also change the presentation of the chart.
10. Close the excel file and launch the C# solution
11. Check if the chart is correctly displayed
12. Change the C# program in order to be able to change the temperature of the city you added instead of the temperature of Caille.

Your turn to play

13. Open the excel file and create a chart in the sheet « comparison Nice » that displays the difference between the 2018 temperatures and the normal seasonal temperatures (complete the table in sheet « 2018 Nice »)
14. Open the C# solution
15. Add a new « win-form project » named « nice-temperature-charts ».
16. Copy/paste some necessary code from the smart_building_lab1 project in order to display the chart you created in the excel file. Don’t forget to close the excel file before launching the C# program.