

Exercise: Serialization of configuration

In this exercise, you will be acquainted with the serializing objects. This exercise has absolutely no purpose other than to train the use of serializing and deserializing by means of the .Net JsonSerializer class or XmlSerializer class.

Choose to use either the JsonSerializer or the XmlSerializer through the exercises.

Exercise 1:

Define a suitable class to contain the following data for a patient:

- First name(s)
- Last name
- Age
- Systolic BP
- Diastolic BP
- Smoker (yes/no)

As you do so, consider the data type for each of the data fields. String, integer, Boolean, ...

Exercise 2:

Define a program that defines an object of the patient class from Exercise 1. The program must enter data into this object, which corresponds, to Danny DeVito, age 76, who has a BP of 198/120 and is a chain smoker.

Then, the program should serialize the data to the file "Danny.json" or "Danny1.xml"

Exercise 3:

Modify the file generated in Exercise 2 so that Danny stops smoking and his BP drops to 150/102. You should do this modification by hand, i.e. using e.g. Notepad to modify the file. Save the file as "Danny2.json" or "Danny2.xml"

Exercise 4:

Extend your program so that it reads the file from Exercise 3 into a new patient object and prints the information to the console. Does it reflect your changes?