Lehrstuhl für Computergestützte Modellierung und Simulation
TUM School of Engineering and Design
Technical University of Munich

Professional Software Engineering

Lecture 5: Code-Along Exercise

Create a program that imports an XML file of your lecture timetable and outputs your schedule to the console.

You can export your timetable as an XML file by following the steps below.

1. Log in to your TUM account on `https://campus.tum.de`
2. Click on *Calendar*
3. On the top, click on the button titled *Export*
4. Export a complete week, *i.e.* 7 consecutive days, from 14.11.2022 until 20.11.2022, for example
5. Select *Download as XML* and click on *Download*

Your program should include the following two classes, in addition to an Enum that represents the days of the week (Monday, Tuesday etc.).

- Lecture: A class that represents a lecture and includes the start and end time, in addition to the day and the name of the lecture. Disable the default constructor by setting it to private, and replace it with a constructor that takes four arguments (start time, end time, name and day).
- Timetable: A class with a container that can store Lecture objects. The class should also contain methods to add new lectures, print out the lectures on a specific day, print out all lectures[1].

In your main class (or in a separate static class), create a static method that imports the lectures XML file and uses the content to set up a complete Timetable object.

Once you are done, try printing out your schedule for several days to the console.

Bonus: In general, some of the entries in external data files (xml , csv etc.) may be incomplete or invalid. Modify your program to handle invalid lecture information (e.g. what if the lecture name or day is missing?).

[1] When printing out a lecture, all four properties should be printed (name, day, and start and end times)